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EXCAVATIONS AT VERULAMIUM, 1955

INTERIM REPORT

By S. S. FRERE, F.S.A.

INTRODUCTION

LATE in 1954 it became known that plans existed for a new road across the site of Verulamium. This new highway is to enter the Roman city along the line of Blue-house Hill, and from the angle at the entrance to the Gorhambury Drive will strike across the fields to the A.5 road at Batchwood Drive. Its line thus bisects the city, and the work will involve the destruction or sealing of important Roman sites including the northern edge of the Forum.

Accordingly the Research Committee of this Society undertook the archaeological examination of the area, entrusting the direction of the work to the writer; and it took steps to reconstitute the Verulamium Excavation Committee to take local responsibility. This Committee includes both the Bishop and the Mayor of St. Albans among its members as well as our President and Director. We have been fortunate to secure the services of Lord Verulam as Chairman; Mr. J. Broad, F.S.A., consented once again to act as Treasurer, and Mrs. M. Aylwin Cotton, F.S.A., shouldered the burden of Secretary to the Committee, on which the presence of Mr. W. B. Murgatroyd and Mr. A. S. Moody ensured the active and liberal participation of the St. Albans Corporation. To all these and to Mr. J. Lunn, Director of the Verulamium Museum, the writer owes a very real debt of gratitude for support and many forms of material assistance. Financial aid was obtained from H.M. Ministry of Works, the British Academy, and the Haverfield Trustees, in addition to the funds made available by our own Research Committee; and a public appeal was productive both on the site and farther afield.

Work began on 16th June and continued until 20th August 1955. Up to fourteen paid labourers were employed, many of them Cambridge undergraduates: in addition large numbers of volunteer helpers came for varying periods. So large an undertaking was only possible because the writer had the assistance of Dr. and Mrs. Raymond Allchin, J. J. Butler, John Wachter, F. Jenkins, R. Hope Simpson, and John Alexander for varying periods, and of Miss M. G. Wilson, F.S.A., for the entire excavation, as site supervisors. Miss N. Lord was in charge of photography, and Miss C. Western supervised the technical department, and both relieved me of much of the office work.

Excavations were begun on the south side of Bluehouse Hill, and were in the main confined to the strip under threat of destruction. This strip, some 425 yds. long by 15 yds. wide, lay in an arable field, the whole of which was put at our disposal by Lord Verulam.

THE EXCAVATIONS

Three town houses were found running down the north-west side of *Insulae* XX-XXII, but as the street they faced lies north-west of Bluehouse Hill¹ erosion of the lane has destroyed substantial portions of them. In addition, extensive eighteenth-century robbing of materials right down to natural soil was encountered at the north end of the site adjoining the lane, and this had destroyed most of Building XXII, 1, as well as removing the metalling of the street dividing *Insulae* XXI and XXII. The position of this street, however, could be fixed by the characteristic silt which had washed off its surface into the upper filling of a Claudian boundary ditch on its north side.

The precise chronology of the buildings uncovered remains to be worked out by a detailed study of the finds, and is reserved for the final report. Nothing was found to indicate construction as early as the Claudian period, nor was any pre-Roman level found. Unfortunately the latest Roman and sub-Roman levels had all been ploughed away.

Building XXII, 1

The main walls of Building XXII, 1, were flint built, and its internal partitions were timber-framed; it seems to have had a wooden verandah along the street. South-east of the building was a cobbled yard. The main living rooms had been robbed away, leaving a corridor with plain red tessellated floor along the south-east side. This floor had had a long life from the end of the first century A.D. into the fourth century A.D., the outer wall having been rebuilt at the end of the third century A.D. The floor had been buried by the fall of the timber-framed clay wall along its inner side. This wall, coated with painted plaster on both faces, had fallen over almost intact, as if pushed. Considerable portions of the decoration in plain panels of red or yellow were preserved, thanks to the skilled work of Dr. Norman Davey, F.S.A., and Miss Cecil Western, and are being studied by Miss J. Liveridge, F.S.A.

At the north end of the building was a cellar, 9 ft. 6 in. deep from the surface, its walls rendered in white plaster with red angle-bands. This cellar extends into the Rectory Field which contains the south-west side of the Forum together with Building C excavated by Sir Mortimer Wheeler in 1949.² It will be further explored in 1956.

Building XXI, 1

The main rooms of House XXI, 1, had been eroded by Bluehouse Hill. What remained was a tessellated corridor running north-east to south-west the length of the

¹ For the plan of the Roman city see R. E. M. xv, June 1941.
and T. V. Wheeler, *Verulamium, A Belgic and two*

Roman Cities, pl. cxix; or P. Corder, *Antiquity*,
² *St. Albans & Herts. Archit. & Archaeol. Soc. Trans.* 1953.

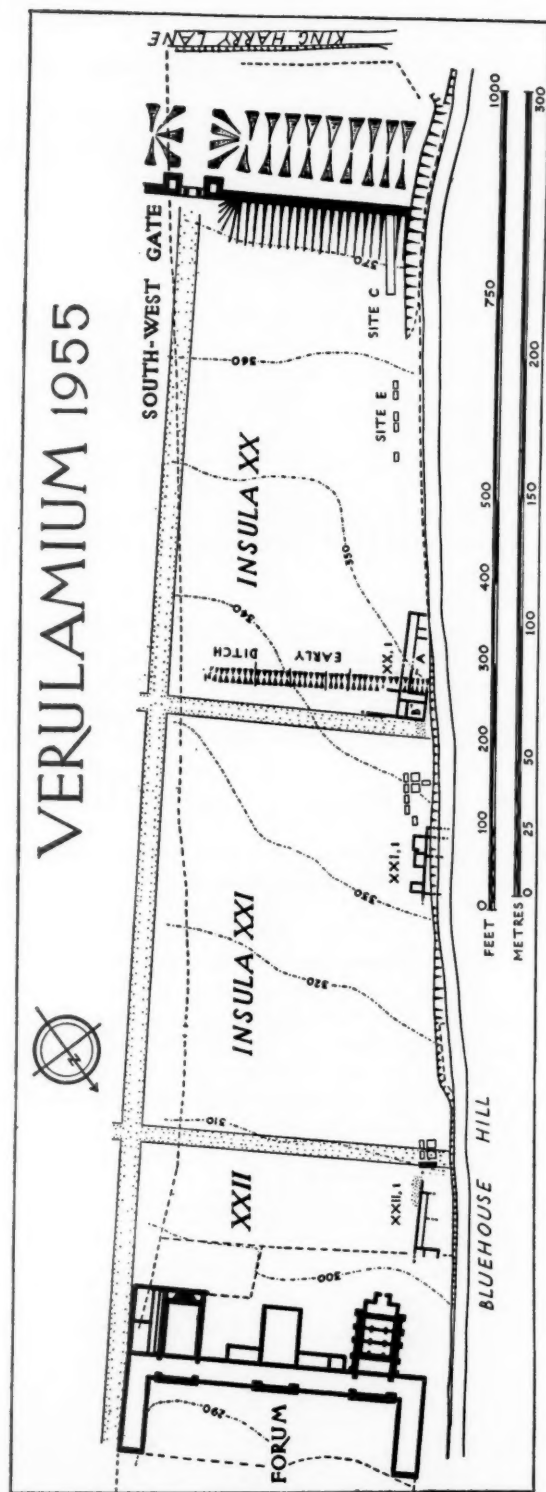


Fig. 1. General plan.

building, with a series of three separate rooms added subsequently to the south-east. The tessellated floor of the corridor was a late feature of the house since it extended over two demolished walls towards its south-western end.

This flint and mortar building was not the first to occupy the site, for a clay-walled structure with *opus signinum* floor was found to underly the north end of the corridor. Little of this early building was recovered: it did not appear to date before the close of the first century A.D.

The most northerly of the added rooms south of the corridor had a well-preserved hatch-way on its south-west wall (pl. II *a*). This opening, which was 18 in. wide and 17 in. high, lay near the base of the wall. The impression of the timber sill survived; the top of the opening was not arched in any way, but had been supported on a plank lintel. This had of course disappeared, but the flint and mortar course above it survived intact, and was consolidated by us with polyvinyl in toluene. Such a small low opening, into a room containing no signs of a hypocaust or indeed any other feature but the slightest of pebble floors, can only have served as a hatch perhaps for the exit of poultry, or more probably for the delivery of fuel. The room may thus have been a store.

The room at the south-west end contained a cellar entered by a ramp from the south-east leading down its north-east wall. The cellar was filled with fragmentary wall plaster, of highly variegated colours, which had clearly collapsed into it from a ground-floor room above, since the cellar itself had walls painted white with the usual red angle-bands. After the collapse this room had been abandoned, for the upper walls of the cellar had been robbed in Roman times before the insertion of a filling to level up.

Insula XX: The early ditch (fig. 1 and pl. IV, section A-B)

Here the earliest feature is the large ditch which was subsequently traced right across the field to the south-east, with indications of a possible corner at the bottom; more work remains to be done here.¹ The ditch is *c.* 9 ft. 6 in. deep from the old surface and *c.* 19 ft. wide. The primary silt contained a few small worn sherds of pottery which seemed to be of Roman age. After some collapse of the gravel sides, a fairly substantial amount of black occupation earth (pl. IV *b*, layers 25 and 27) had been flung in containing bones and oysters as well as a large group of pottery. After a preliminary inspection of the Samian which included substantial pieces of two bowls of form 37, Mr. B. R. Hartley has stated his opinion that it is all South Gaulish ware of the period A.D. 85-100. With this the coarse pottery agrees. Above this was a thick band of leached light brown loamy gravel (24) and a thinner band of orange clayey gravel (20), both clearly representing the bank flung down into the ditch.

The implications of this ditch will be discussed below. Here it is sufficient to note that it had ceased to serve its purpose by about A.D. 100, and was shortly after levelled off. No indication of a bank was observed on the lower (north-east) side. On the south-west or upper side a modern trench, appearing to be a regularly

¹ There were no surface indications in this field; but in the field north-west of Bluehouse Hill slight superficial traces exist.

cut archaeological trench which respected the corridor wall, ran along its edge and confused the picture. In addition, two late Roman pits obscured the section. South-west of these, however, was a thick layer of leached gravel which did not appear to be natural, and might represent the base of a rampart *in situ* (pl. iv b, layers 22 and 30). The exact division between it and natural soil was hard to define: for whereas the natural soil is basically an orange clayey gravel, it is often leached in patches to a light brown loamy gravel, presumably by the washing out of its ferruginous content by rain percolation. This appears to have happened to an even greater degree to the looser material of the bank (22, 30, and 24).

While certainty must await further excavation, we were left with the impression that the spoil from the ditch was piled on its upper or south-western edge. This impression was strengthened when it was observed that the chalk footing of the corridor-wall stopped where it ran into the putative bank, though the flint wall above ran on farther before it too ceased, apparently having been ploughed away on the crest. The chalk footing resumed again farther west. It certainly seemed as if the builders had encountered a consolidated hump at this point which led them to feel that footings were unnecessary.

House XX, 1

After the filling of the ditch had had time to consolidate and sag slightly, House XX, 1, was erected. This seemed to be in Antonine times, for the clay floor of the corridor contained a worn coin of Faustina II (A.D. 147-50). Into the U-shaped hollow which now marked the ditch layers of chalky make-up were flung, on which was a wide mason's spread of mortar. This in turn was sealed by more levelling layers,¹ before a gravel spread was laid down for the courtyard. The clay floor of the original corridor had later been repaired with coarse red tesserae laid directly on the clay. The upper levels of the house, however, were badly damaged by the plough, and north-east of the corridor only chalk footings remained. The western wing of the house lay with the tessellated floor of the corridor just below plough soil. The internal partitions were of timber, and so was the north-west wall of this end of the corridor.

Site E

A number of trenches were dug where the Fosse, traced from the west as far as Bluehouse Hill in the earlier excavations,² might be expected to enter the field. The subsoil was found to be in a confused state possibly owing to natural drainage down the dry valley at the head of which the site lies; but no indication of the Fosse was identified.

Site C (pls. 1 a and iv a)

A trench 10 ft. wide was cut into the defences of the extended Roman city. These defences have hitherto been dated 'not later than the second quarter of the second century A.D. . . . with a strong indication that the work occurred rather in the reign of Hadrian than in that of Pius'.³ The purpose of this cutting was to gain

¹ A Samian sherd from layer 18 fitted one from layer 11.

² R. E. M. and T. V. Wheeler, *op. cit.*, pl. cxix.

³ *Ibid.*, p. 75.

further light on the dating, recent work on town walls in Britain having shown that a Hadrianic date is unusually early for masonry defences; while experience has shown that the greater the number of cuttings the sounder is the basis for inference, the acquisition of the necessary evidence being largely a matter of chance. This evidence must usually consist of datable material incorporated in the bank flung up behind the walls; and in the nature of things such a bank, scraped up from various sources, will contain much that is earlier but little that is contemporary with the operation. Only after repeated samplings can probability be reached that the true dating has appeared.

At Site C the entire wall had been robbed away, and only its carefully laid footings of large flints in clay survived. That the bank to its rear is contemporary with it must be assumed from the evidence published by Sir Mortimer Wheeler from better-preserved sections elsewhere;¹ it cannot be demonstrated here.

Below the bank proper was a small primary mound, derived from the footings trench; it consisted of humus, leached sandy gravel, and orange clayey gravel piled on the reverse of their natural sequence (pl. iv a, layer 8). Above this came the main bulk of the bank, badly truncated by weathering and the plough. The main part of the material had come from the external Ditch which we did not excavate: it consisted of leached or clayey gravel and was practically sterile. The primary tip, however, delivered between the wall-back and the low mound from its footings trench, and overflowing down the back of the latter, was a dark occupation soil full of bone, oyster shell, charcoal, and pottery, derived from within the settlement. This layer (5), in addition to much Samian of Antonine date,² contained some sherds of a Castor ware hunt-cup. Such vessels are not considered to have been manufactured before the decade A.D. 170-80. This new evidence was reinforced by that of a worn *As* of Antoninus Pius (R.I.C. 934) struck in A.D. 154/5, which had seen some circulation before being lost.

This coin was recovered from one of the upper layers of the original bank (pl. iv a, layer 2). In the layer above this, a plain earthy gravel which was clearly the product of erosion from the bank itself, was found a *denarius* of Septimius Severus of A.D. 200-1 (R.I.C. 166) in mint condition. If it could be accepted that this coin derived from the bank a *terminus post quem* of about A.D. 200-5 would be obtained; but such an inference is risky.

Nevertheless the evidence of the Samian, Castor ware, and coin of Pius are quite decisive for a date not earlier than c. A.D. 180-90 for the bank, and they carry with them the entire enlarged circuit of the city: for it will not have escaped notice that the bulk of the evidence comes from the base of the bank, and there can be no question here of subsequent additions or repairs. It should perhaps be emphasized that such a date is but a *terminus post quem*; we cannot be sure that even now finality has been reached.³

¹ *Op. cit.*, pl. xx, Section A-B, where the bank seals an offset in the wall.

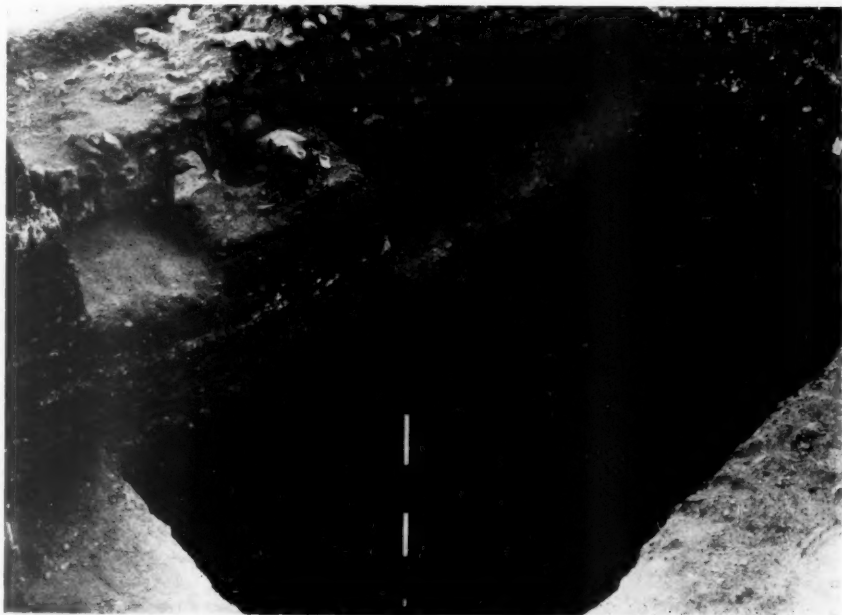
² I have had the benefit of Mr. B. R. Hartley's preliminary examination of this material. He has picked out nine pieces as having been manufactured

after c. A.D. 160.

³ However, the gap is not large. That the wall had been in existence some years by A.D. 235 seems certain from the coin hoard found buried in the floor of a wall-tower, *op. cit.*, 62.



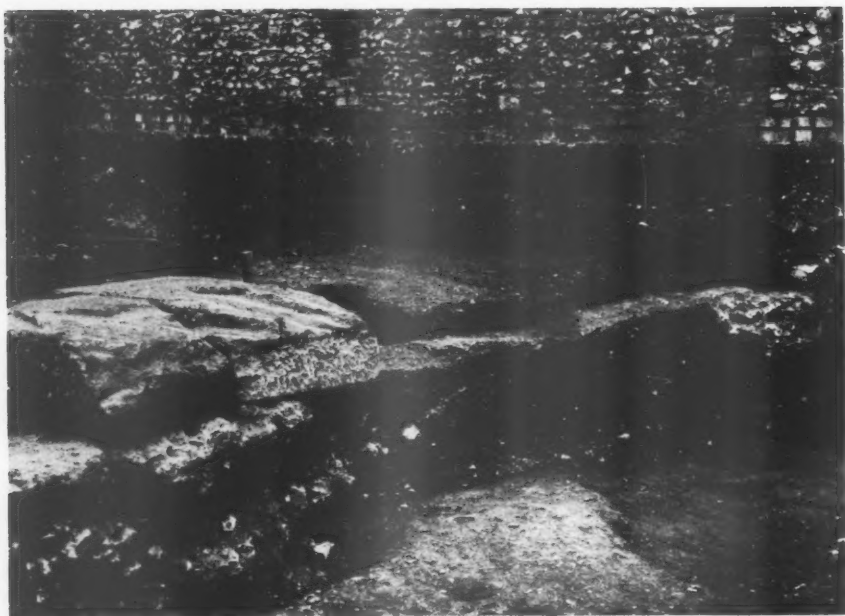
a. Site C: Section through the bank of the later defences, looking south-west



b. The early ditch below Building XX, 1, looking south



a. Building XXI, 1, the hatch-way, looking north



b. St. Michael's Church School yard: the third-century entrance into the Forum complex, looking south-west

CONCLUSION

This excavation, though a rescue dig confined to a narrow straight-jacket on the ground, has not lacked results of more than normal interest. There have been additions to the plan of Verulamium, two of the buildings producing cellars. More important to the general history of Roman Britain is the discovery of evidence that the new walls of the extended city were not in existence before the closing decade or so of the second century. Most interesting of all, because completely unsuspected, comes the discovery of the new early ditch. This ditch is of a size to qualify it as a military obstacle. It had gone out of use by c. A.D. 100. When was it dug? The possibilities would seem to be

- (1) in Belgic times, perhaps as an outlying defence of Prae Wood,
- (2) by the Romans at the conquest period,
- (3) by the citizens against Boudicca,
- (4) by the Romans as a defence-post thereafter.

To choose between these possibilities more evidence is needed, but it can be briefly said that the few sherds in the primary silt appeared to make (1) unlikely.

If (3) were the solution, and perhaps in the case of (2), the bank should be on the lower, or north-eastern, side whereas the evidence suggested that it lay to the south-west.

The contours and scale of the ditch are unusual for any Roman Fort, yet cleaning out and weathering might between them produce such an outline, and it is difficult to account for so small an accumulation of silt below layer 27 if the ditch had been open since A.D. 43, or before. Speculation, however, cannot usefully go further until more work has been done on the outline and structure of the rampart.

POSTSCRIPT

As a result of the discovery of parts of an inscription during preliminary building work in the yard just north-west of St. Michael's School, an emergency excavation was carried out by the Committee in conjunction with H.M. Ministry of Works. The digging was supervised by Mr. Andrew Saunders under my general direction, and lasted about four weeks during October. The site proved to be an entrance into the Forum complex, possibly the Basilica, from the north-east side, along which ran Watling Street.¹

It is not intended to describe the excavations here, but the importance of the inscription, on which Mr. R. P. Wright, F.S.A., has kindly contributed a study below, demands a preliminary and provisional publication. It will be sufficient to say that the fragments come from the robbed material covering the base of the north-east wall of the early forum complex, south-east of an entrance at its central point. This entrance is probably about 12 ft. wide, and lay close against the modern

¹ Gratitude is due to Mr. J. Lunn for salvaging the inscription fragments and realizing the importance of the site: through some mischance it was not scheduled.

churchyard which prevented full elucidation. Probably at the end of the third century A.D. an outer porch was added, 10 ft. 9 in. wide and extending at least 50 ft. from the entrance. The inscription doubtless originally occupied a position over the early entrance. Apart from its historical and epigraphical importance, it gives a pleasing and unusual exactitude to the period of erection of the original Forum. Whether the new entrance leads into the external long side of the Basilica or into some outer court flanking it on this side is a question raising important structural and topographical problems which cannot be discussed here.

A NOTE ON THE INSCRIPTION (pl. III)

By R. P. WRIGHT, F.S.A.

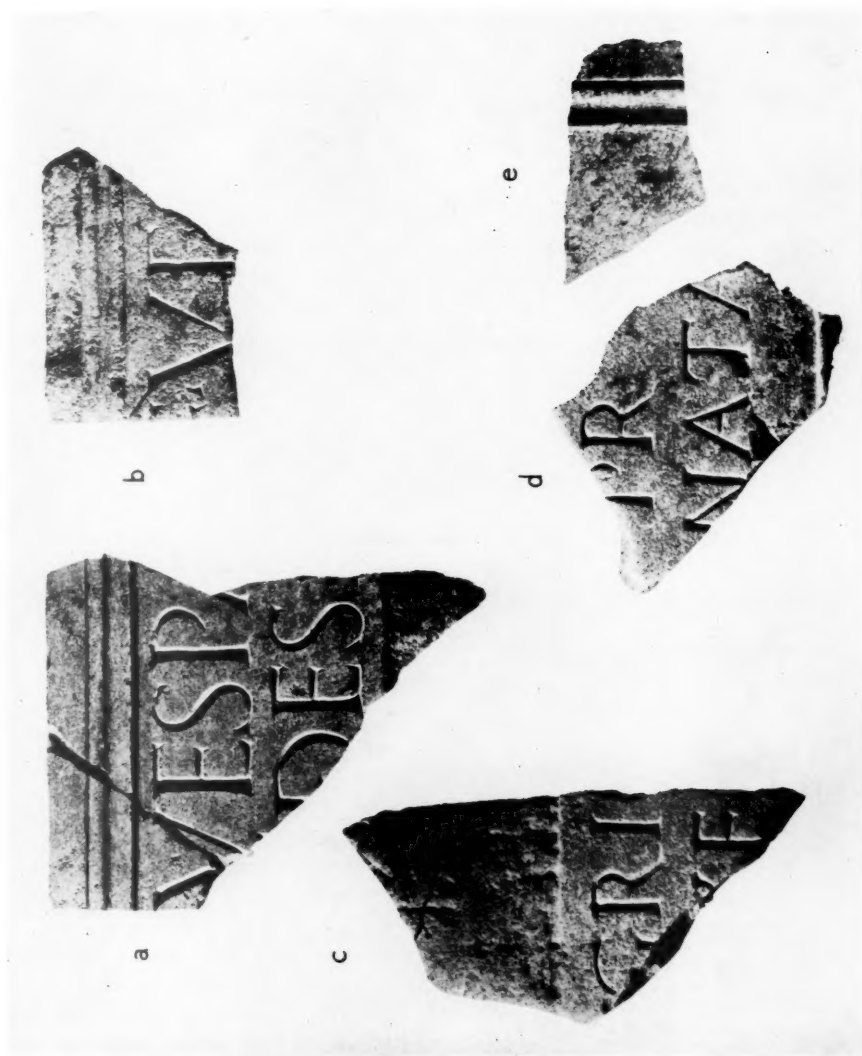
THE fragments of the imperial inscription found on the site of the entrance to the complex of Forum and Basilica are five in number, of which the first four are inscribed. The inscription was composed of panels of Purbeck marble. The left edge of two of these is preserved on fragments (a) and (b). On the top margin of (a) there is a socket, 2 in. wide by $1\frac{1}{2}$ in. from back to front by $1\frac{1}{2}$ in. deep, for a clamp to fix the panel to the masonry structure. Part of a similar clamp-hole survives on fragment (b). The moulded margin of the inscription is $4\frac{1}{4}$ in. high, and the stone is here 3 in. thick, while the die is $2\frac{1}{2}$ in. thick. The height of each slab will have been 3 ft. $5\frac{1}{2}$ in., or, for the die alone, 2 ft. 9 in.; on the restoration proposed below the total length of the inscribed die will have been approximately 13 ft. At the time of the discovery there were traces of red paint on fragment (a) in the E of VESPA, and on fragment (b) in the V of VES. Fragments (a) and (e) show hardly any weathering, as if the inscription suffered little damage while displayed on the building. The other fragments show a certain amount of weathering which presumably occurred after the inscription was broken up.

The heights¹ of the letters are: in l. 1 $4\frac{5}{8}$ in., l. 2 $4\frac{3}{16}$ in., l. 3 $3\frac{1}{4}$ in., l. 4 $3\frac{3}{8}$ in., l. 5 $3\frac{3}{16}$ in., l. 6 $3\frac{1}{8}$ in. The deletion of ll. 3 and 4 makes it hard to measure the remains of the letters, but the upper line seems to be slightly shorter than the lower one. Apart from this exception, the Roman practice is followed by making the height diminish line by line.

Fragments (a) and (b) retain their upper margin, and (d) has a small part of the lower margin. Fragment (c) has the base of a V from l. 2, the deleted area marking ll. 3 and 4, and]GRIC[in l. 5 and]VEI[in l. 6. A fifth fragment (e) has part of the margin in similar moulding and dimension, and must have come from either the right or left side or, less probably, the bottom in connexion with an indented line. There was thus a vacant area of two letter-spaces (if calculated from one side) or of more than one line (if calculated from the lower margin).

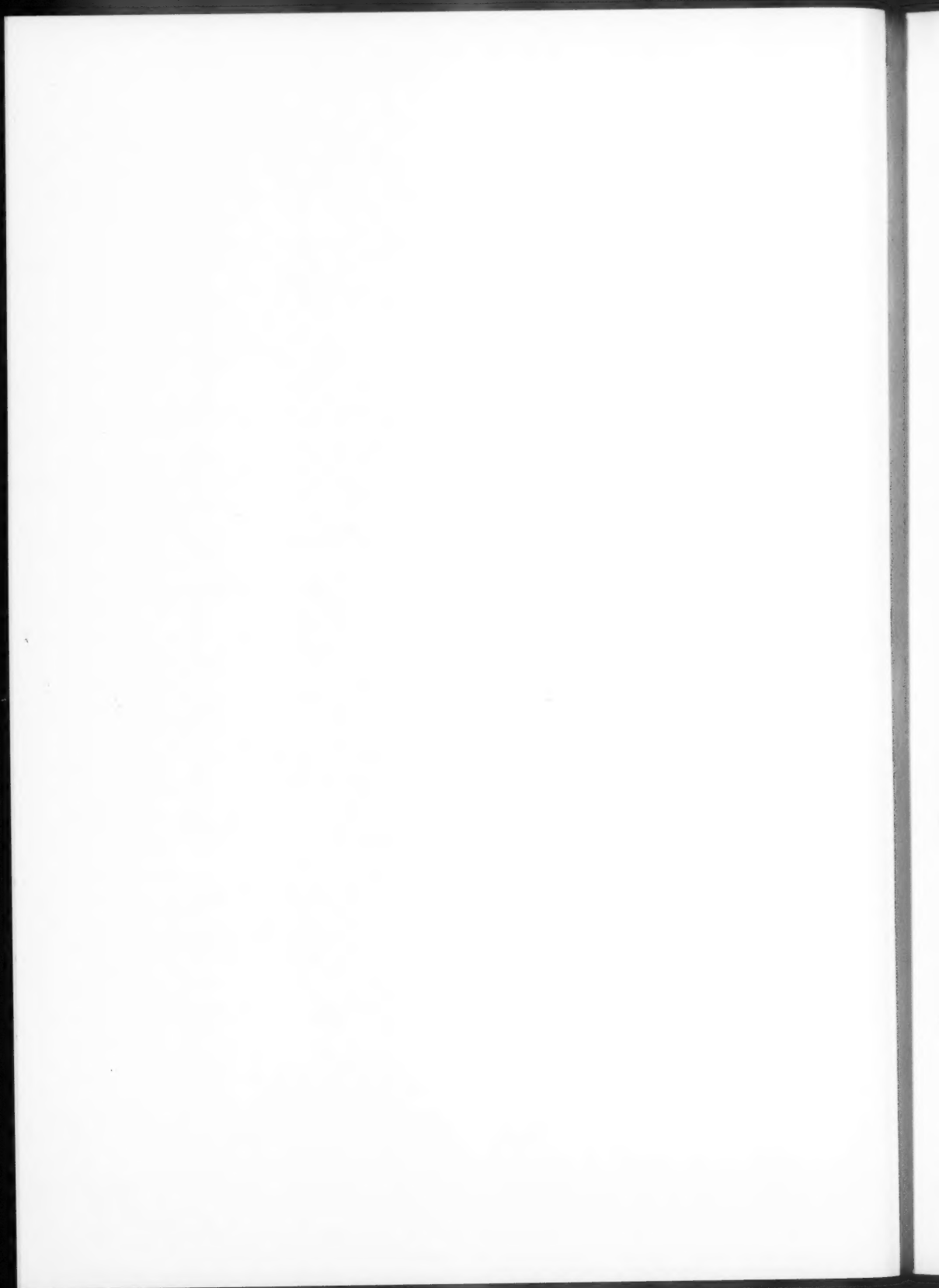
In l. 1 the letters]VESPA[and]F VES[must be *Vespa[siani]f(ilius) Ves[pasi-*

¹ On the comparable inscription from Wroxeter l. 2 $8\frac{1}{2}$ in., l. 3 $7\frac{1}{2}$ in., l. 4 $6\frac{1}{2}$ in., l. 5 6 in. The die (Atkinson, *Wroxeter*, pp. 177 ff.) the heights (as of the inscription is 11 ft. 10 in. wide by 3 ft. $9\frac{1}{2}$ in. measured by the present writer) are in l. 1 $9\frac{1}{8}$ in., high.



Verulamium Forum: the Flavian inscription from the north-east entrance. ($\frac{1}{8}$)

(The correct vertical spacing of the six lines has been retained, but the lateral intervals have been contracted)



anus, part of the style of Titus. The height of the deleted area on fragment (c) is slightly greater than the height of the two lines and intermediate space on fragment (d). This represents ll. 3 and 4 and carried the names and titles of Domitian, which were deleted after his death in A.D. 96. As Titus is called *cos.* ¹ *desi[gn]*, and as neither he nor Domitian held the consulship in A.D. 81, this designation must fall in A.D. 79. The inscription comes between the death of Vespasian, 24 June 79, and the end of that year. An inscription in a distant province mentioning the new emperor could not have been planned and cut within the first week of the reign of Titus, and so it will fall after 1 July 79, when Titus' ninth year of tribunician power began. Tacitus (*Agric.* 21) mentions the private encouragement and public assistance which Agricola was giving, no later than 79, and perhaps a year earlier, to the communities for building temples, *fora*, and private houses.

Imperial dedications in the age of the Flavians, as under Trajan, cited the emperors in either the nominative or the dative case. In addition to milestones, there are instances of the ablative being used, but something more than mere dating seems to be needed here. Military units (put in the nominative) generally used the dative for the emperor for whom they erected the building. A civil community may have followed this pattern, as at Wroxeter; or it may have kept the imperial names in the nominative as the ultimate source of official encouragement through the agency of the governor, and expressed in the dative the name of the community for whose advantage the work was done. Until further fragments are found it seems impossible to settle the question with full certainty. In the restoration provisionally put forward at the end of this note the nominative case has been adopted, but the use of the dative would make little difference in the spacing of the lines.

In l. 1 as the name *Vespasianus* was not abbreviated it must have been given in full both for Titus and his deceased father. To match these the words *Titus Caesar* would also appear in full. But while *Imperator* and *Augustus* may possibly have been given in full, on Flavian inscriptions they were frequently abbreviated to *Imp.* and *Aug.*, and will in this instance match the next three lines in length. On Flavian inscriptions *pontifex maximus* and *tribunica potestate* are given in full or in partial abbreviation. Here the use of *p.m.* and *tr.p.* seems required to balance the second half of this line and to match ll. 3 and 4. There is the additional advantage that it will save approximately 3 ft. in the length of the inscription, which even so will have been about 13 ft. long.

It is reasonable to suppose that ll. 3 and 4 were deleted for their full length because they cited Domitian. His names and style would balance the first two lines giving his brother's description, but are cut in lettering only slightly taller than the smaller gauge which sufficed for ll. 5 and 6. In l. 3 on fragment (a)]M1[can be seen from the grooves at the foot of the deleted letter-cuts. On fragment (c) in l. 3]IAN[and in l. 4]. . TI.[can be recovered, to read *Vespasiani f. Do]mi[tianus*, and *princeps iuventu]ti[s]*. To fill out l. 4 the position² of Domitian as *collegiorum omnium sacerdos* was presumably mentioned.

¹ Part of a superscript bar above a numeral has survived before DESI[GN].

² Mr. E. Birley kindly suggested this title from the

analogy of Vollmer, *Inscr. Bavar. Rom.*, no. 257 a, b (Koesching). See also *ILS*, 267.

In l. 5 the governor is clearly *Cn. Iulius Agricola*, and the base of the letter *v* at the top of fragment (c) enables us to assign the fragment to one of three numerals in l. 2. If it is part of *VII*, the line with the governor's name will be substantially inset, so that, unobtrusively, it could catch the eye. In Julio-Claudian inscriptions the governor's title was expressed, as *pro pr(aetore)*, if abbreviated at all. In the second century *pr(o) pr(aetore)* became the common usage. During the transition in the Flavian age the fuller formula was frequently retained,¹ and seems likely in this inscription, as the addition of an extra letter will help to make the indentation at either end of the line nearly equal.

In l. 6 no restoration seems possible without more evidence. From the letter which follows *VE* there remains a vertical stroke² with the left portion of two serifs. Either *L* or *R* is readable. *VEI* may be part of: *civitati Catu]vel[launorum* or *rei publicae] Ver[ulamienisium, or municipio] Ver[ulamienisium, or municipio] Ver[ulamio].*³ No satisfactory past participle in agreement with a feminine noun for the building seems to fit *]NATA[* in this context. Alternatively it should be remembered that *NATA* might be part of a personal name. There is a slight possibility that the procurator might have been mentioned on a civilian building-inscription, if on this occasion the work was being financed from imperial funds. For a solution more evidence seems to be required.

The provisional restoration⁴ proposed is as follows:

[*Imp. Titus Caesar divi] Vespa[siani] f. Ves[pasianus Aug.]*
 [*p. m. tr. p. VIIII imp. XV cos. VII] desi[gn. VIII censor pater patriae]*
 [*et Caesar divi Vespas]ian[i f. Do]mi[tianus cos. VI design. VII]*
 [*princeps iuventu]ti[s collegiorum omnium sacerdos]*
 [*Cn. Iulio A]gric[ola leg. Aug. pro pr.]*
 ... *]VEI[*... ... *]NATA[*...

¹ Professor R. Syme kindly suggested this. The shorter form, *PR PR*, is used on the contemporary inscription moulded on the water-pipe found at Chester (*EE* ix, 1039), but there may have been more reason for brevity on a pipe than on a monumental inscription.

² The left part of the serif is only $\frac{1}{8}$ in. narrower than that on two *R*'s in ll. 5 and 6, and is equal to the same serif on *E*, which is the nearest extant letter comparable to *L*.

³ The restoration *conventus* is hypothetically possible for an *assize-area*, but it is hard to see why

such a group, otherwise unattested in Britain, should have built an important public building in a town which, because of its proximity to London and Colchester, was hardly its headquarters. The letter *N* seems less likely as the comparable *N* in *]NATA[* has a less pronounced backward serif.

⁴ The present writer thanks Mr. J. Lunn, Director of the Verulamium Museum, for kindly granting access to the fragments. He also makes grateful acknowledgement to Mr. E. Birley for discussing some of the problems in the restoration.

THE NEOLITHIC CAUSEWAYED CAMP AT ABINGDON, BERKS.

By HUMPHREY CASE, M.A., F.S.A.

THE situation of the Neolithic Causewayed camp at Abingdon, discovered by the Rev. Charles Overy and made famous by the late Mr. E. T. Leeds,¹ is well known and only requires summarizing. It lies on a spur bounded by the valleys of two brooks at the south edge of an expanse of Summertown-Radley terrace gravel, three-quarters of a mile north of the Thames.² The two concentric ditches, to which reference is made below, lay between the brooks; a third similar ditch, of which pit A was possibly a section, may have lain to the south.³ The site was at its highest (about 202 ft. O.D.) at about the centre of arc of the outer ditch, whence there was a gentle southerly slope. The expanses of Summertown-Radley gravel in the Oxford region have been found rich in prehistoric finds, that between Radley and Abingdon being no exception.⁴

I. THE 1954 EXCAVATION

The late Mr. E. T. Leeds often told the writer of his belief that an *outer ditch*, concentric to the ditch which he excavated in 1926/7 (here called the *inner ditch*), lay under St. Helen's housing estate north of the Radley road (fig. 1). Study of an aerial photograph, taken before the estate was developed, revealed its intermittent crop-mark in the position which he had surmised.⁵ A likely spot for successful investigation was found to be the garden of no. 15, where Mr. Armstrong very kindly gave permission for a resistivity survey,⁶ and then for excavation.⁷

A 30 ft. by 9 ft. cutting was made. The ditch was found to have been dug in Summertown-Radley gravel. Two bands of clay had been cut through and the surface of a third cleared of gravel; this surface had given an even horizontal floor, which was found to have been unperforated and unmarked.

¹ See his reports in *Antiq. Journ.* vii, 438-64 and viii, 461-77. The frequent encouragement given by Mr. Leeds to excavate the site further is a very pleasant recollection.

² National grid reference: SU/511983. O.S. 25 in. edn.: Berkshire Sheet x, 3.

³ *Antiq. Journ.* vii, 439-40; *loc. cit.* viii, 461. The stratification seems to have been similar to that of the inner ditch.

⁴ See *The Oxford Region*, ed. A. F. Martin and R. W. Steel (1954), pp. 76-81.

⁵ Ordnance Survey photograph (R.A.F. No. 3151) given to the Ashmolean Museum in 1930.

⁶ Using Atkinson's method. *Field Archaeology* (1953), pp. 31-38.

⁷ Warmest thanks are due to members of the Abingdon branch of the Workers' Educational Association who surveyed and excavated in their spare time. Mention should be made of Mr. D. Smith and Mr. D. Williams for the survey, and Mr. H. Green for excavating.

I am grateful to Miss I. F. Smith for help in preparing this paper, having discussed most of it in detail with her; she has most generously given access to her notes and drawings. I am grateful also to Mr. W. E. V. Young and to Colonel Afonso do Paço for showing me the Windmill Hill and Vila Nova de S. Pedro collections respectively, and for valuable discussions I have had with them.

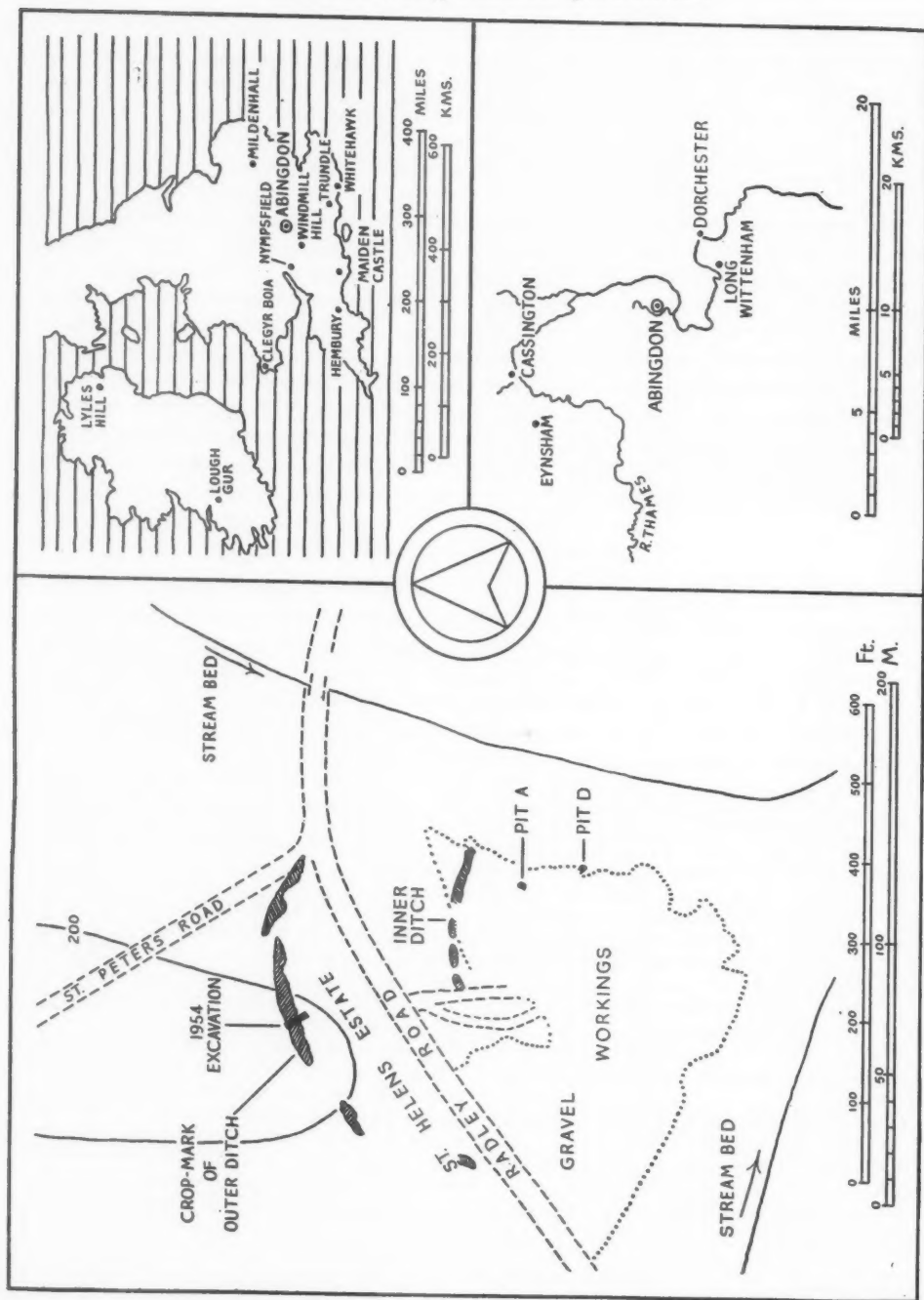


FIG. 1. Plan of the causewayed camp at Abingdon, Berks.; its regional and national setting

The layers discovered (see fig. 2) were as follows:

Layer 1, the garden loam (dark yellowish-brown—10 YR/3/4 moist—fairly stony sandy loam), was underlain by layer 2 (dark yellowish-brown—10 YR/4/4 moist—fairly stony sandy loam) making a strong contrast when dry; they were underlain, away from the ditch, by the weathered gravel.¹ Calcareous concretion, similar to that noted by Mr. Leeds,² was found on the small surface of weathered gravel exposed south of the ditch; there was also a concreted layer below the upper band of clay.

Over the ditch, layer 2 merged imperceptibly into 2a (dark brown—7.5 YR/4/4

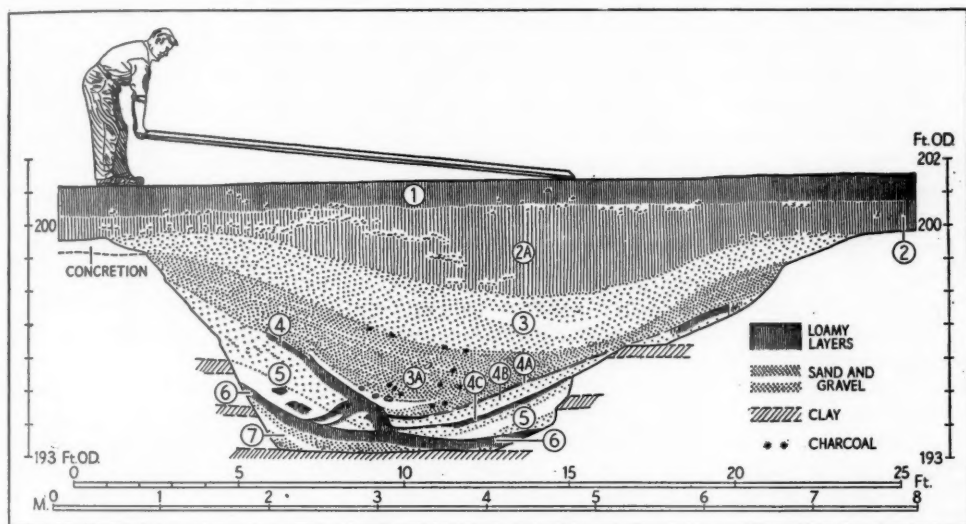


FIG. 2. Section of the outer ditch of the causewayed camp at Abingdon, Berks.; the figure stands by the south edge

moist—fairly stoneless sandy loam). Layers 3 and 3a were yellowish-brown sand and gravel (10 YR/5/6 and 10 YR/5/4 moist). When weathered, 3a appeared markedly redder, possibly because of a greater loam fraction. Small irregular blocks of clay, about the size of a fist or slightly larger, were a feature of this layer and of the gravel layers below.

Below 3a, alternate bands of gravel or sand or slightly loamy sand succeeded to the bottom of the ditch. The banding on the north and south sides differed, as a result of the greater volume of filling, particularly of loamy sand, which had come from the south. Some of the loamy sand on this side occurred in isolated or contorted blocks which made local irregularities. Apart from these, the layers shown on fig. 2 was consistent. The gravel or sand layers (4b and 5) were rather yellower than those above (yellowish-brown—10 YR/5/8 moist), while the slightly

¹ The ciphers 10 YR/3/4 moist, etc., denote the colour of a moist sample according to the Munsell system. See *Munsell Soil Color Charts* (1949).

² *Antiq. Journ.* viii, 461.

loamy sand layers were strikingly red (e.g. layer 4, reddish-brown, 5 YR/4/4 moist; layer 6, yellow-red, 5 YR/4/6 moist). Layer 7 was variegated reddish and yellowish-brown gravel and sand.

The following points are of interest:

1. The bands of loamy sand below 3a represented topsoil material, the bright red colour of which was noteworthy.¹
2. As with the inner ditch, the upcast had been placed on the south side presumably to form a bank.² Some of the loamy sand derived from this side occurred in the filling as blocks, as though large masses had slipped in unbroken, suggesting that the bank may have had a facing wall of turfs.
3. A wall of this kind might have held up the bank for a year or two; but the ditch eventually widened rapidly on both sides, as the alternate bands of topsoil and gravel suggest. The layers below 4 may be the deposit of only a few seasons. The accumulation of layers 3 and 3a to the angle of rest is likely to have taken longer, while the filling of layer 2a by wind and rain-wash must have been very lengthy. Neolithic occupation probably continued for a while during the formation of this last layer.³
4. The 1954 section was deeper than any published of the inner ditch, although section N 3 was similar in proportion.⁴ Elsewhere, the inner ditch was relatively shallow and gently sloping; for these reasons it had mostly filled with featureless wind- or rain-transported material, which gave poor natural stratification, as Mr. Leeds pointed out to the writer.
5. The blackish layers of the inner ditch were missing. This is not surprising if one assumes them to have been produced by concentrated fine charcoal and organic rubbish; for, living between the ditches, the occupiers of the camp would have been separated from the outer ditch by its bank. The relative scarcity of finds from the outer ditch can also be explained in this way.⁵

The Finds

Pottery (figs. 3 and 4)

Features of all the sherds described below as of Abingdon ware can be matched with finds from the inner ditch.⁶ The proportion of sherds with well-preserved slip inside and out is, however, greater, showing the present-day speckly appearance of much of the Abingdon pottery to be due probably to weathering. A warm grey

¹ Red soils have occurred in the Oxford region at sites on the Great Oolite or the derived Summer-town-Radley terrace gravel, widely spaced in date: (1) Pit filling sealed by Groove ware at Cassington, Oxon. (Cornwall, *P.P.S.* xix, 138). (2) Fillings of Bronze Age barrow ditches, e.g. at Radley, Berks. (Atkinson, *Oxon.* xvii/xviii, 16). (3) Under the bank of the Belgic Grim's Dyke, Ditchley, Oxon. (Harden, *Oxon.* ii, 90).

² *Antiq. Journ.* viii, 466.

³ An occupation layer occurred at the base of the

equivalent layer in the similarly proportioned section N 3 of the inner ditch. *Antiq. Journ.* viii, 465-6.

⁴ *Ibid.* viii, 465, fig. 2c.

⁵ The layout of a causewayed camp may have been somewhat like that of a Zulu village. See Krige, *The Social System of the Zulus* (1936), 43.

⁶ The term *Abingdon ware* is used to denote pottery of Western Neolithic type found at Abingdon and nearby, and has no further implication here. The term *slip* is simply used to denote a surface coating.

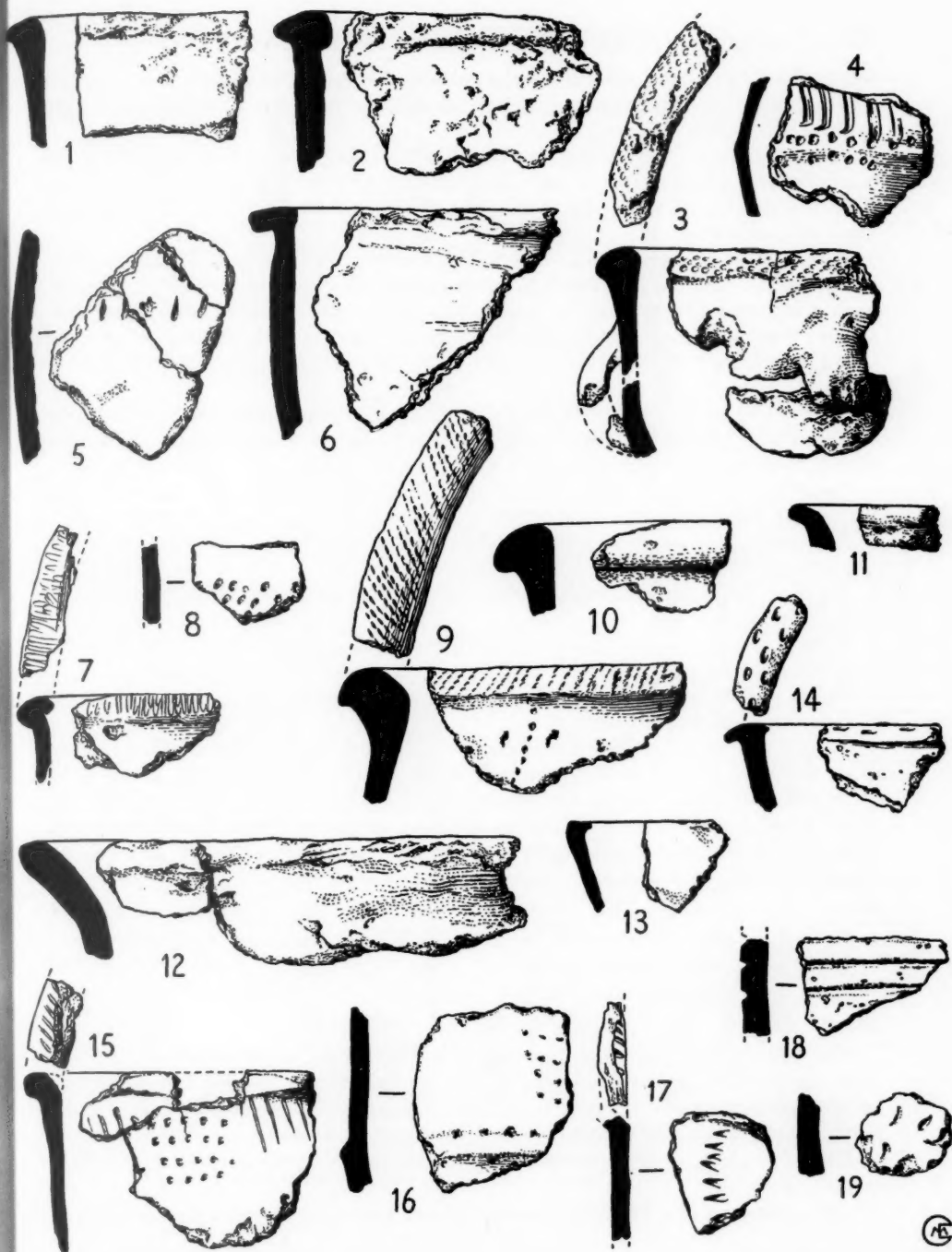


FIG. 3. Sherds of shell-gritted Abingdon ware. 1-8 from outer ditch. 9-19 from inner ditch or area; 9, 14, and 17 from S 1, 10 from H 4, 12 from a pit. Scale: $\frac{1}{2}$. Drawn by Mrs. M. E. Cox

was probably a common colour for the outside of vessels, but brownish and reddish tones occur. Surfaces were probably generally left rough or matt, but were sometimes well smoothed.

Layer 6, at base, lying on layer 7: 5 oz. of rather weathered shell-gritted Abingdon ware sherds, including rim of medium-hard slipped ware (fig. 3, no. 1), rim of soft slipped ware (no. 2), and body sherds of a thin vessel (0.65 cm. thick) of medium-hard slipped ware.

Layer 6, elsewhere: 5½ oz. of better-preserved shell-gritted Abingdon ware, including rim and handle sherds of medium-hard slipped ware with rim decorated with punctured impressions in stripes (no. 3); shoulder sherd of medium-hard slipped ware with punctured impressions and upper part with broad incised stripes (no. 4); and body sherd of soft slipped ware with oblique punctured impressions (no. 5).

Layer 5: 6¾ oz. of medium to hard shell-gritted Abingdon ware sherds, including two rims of slipped ware (nos. 6 and 7), one with lightly incised stripes; and a base sherd (thickness 2.2 cm.) of a round based vessel.

Layer 4c: 2½ oz. of hard shell-gritted Abingdon ware sherds, one with faint smoothing marks and one with corky inner face (for corky ware, see below, p. 20).

Layer 4a: 1½ oz. of indeterminate shell-gritted Abingdon ware sherds, one with well-smoothed outer slip.

Layer 4: 1½ oz. of medium-hard shell-gritted Abingdon ware sherds, including a rim (cf. no. 1).

Layer 3a: ½ oz. of medium-hard shell-gritted Abingdon ware sherds, including body sherd of slipped ware with slightly oblique punctured impressions (no. 8).

Layer 3: ¾ oz. of indeterminate shell-gritted Abingdon ware sherds, including two with well-smoothed surface.

Layer 2a: ¾ oz. of eroded sherds: 1 sherd of hard quartz-gritted ware (*Abingdon No. 2 ware*, see below, p. 22); 1 body sherd of Beaker ware, probably from a vessel of type B with incised zonal decoration (no. 30); 1 base-sherd of possibly the same vessel (no. 31); both sherds are rather soft, and orange in colour with a black core. 4 sherds of Romano-British grey and orange wares. 1 sherd of green-glazed Medieval ware.

Flint

Layer 6, at base: 1 flake with dentate edge, typical of the site.¹

Layer 3a: 1 small unused blade.

Layer 3: 2 indeterminate flakes.

Bone

The finds (4 lb. 11 oz. in all) were simply food refuse, and included no artifacts. The quantitative distribution was similar to that of the sherds; bones were relatively abundant only in layer 6. Identifications were very kindly made by Dr. F. C. Fraser, British Museum (Natural History), as follows:

Layer 6, at base, on layer 7 or on floor of ditch: Ox: 2 fragmentary vertebrae. Sheep or goat: 4 teeth.

¹ *Antiq. Journ.* viii, 467. The industry has recently been discussed by the writer. *Oxon.* xvii/xviii, 10.



FIG. 4. Sherds of No. 2 ware from inner ditch or area; 20 and 22 from N 2, 24 from S 1, 25 from H 4, 26 from S 2, 28 from pit D. 30-37, various sherds; 30, 31 from outer ditch; 32, 33, 34 from pit D; remainder from inner ditch, 35 from N 1. Scale: $\frac{1}{2}$. Drawn by Mrs. M. E. Cox

Layer 6, elsewhere: Ox: 2 fragmentary scapulae, basioccipital bone, distal end humerus, distal end radius, fragmentary axis.

Layer 5: Ox: Proximal end scapula, 2 astralagi, cervical vertebra, rib.

Layer 4c: Ox: Premaxilla, axis, atlas, 2 lumbar vertebrae.

Layer 4b: Ox: Proximal end femur.

Layer 4: Human: Pelvis fragments.

Layer 3a: Ox: Ulna, astralagus, scaphoid, middle phalange, 2 proximal phalanges. *Sheep or goat:* 2 incomplete lower jaws, fragmentary upper jaw.

Layer 3: Ox: Distal end metatarsal, proximal end radius, thoracic vertebra.

Layer 2a: Ox: Calcaneum, middle phalange, navicular, molar. *Pig:* Molar.

From the inner ditch, L. H. Dudley Buxton noted the predominance of ox (especially of young animals) and pig, with deer and sheep also common; human bones were also found.¹ The predominance of ox, and the occurrence of sheep or goat and of pig and human bones are of course normal features of the causewayed camps.²

Charcoal

Charcoal was very occasionally found in layer 2a, but, below it was common in all layers down to 6, quite often occurring in patches about 6 in. to 1 ft. square, as though possibly thrown down in a damp cohesive mass. No hearths were found of the type described by Mr. Leeds. Identifications were very kindly made by Dr. G. W. Dimbleby, Imperial Forestry Institute, Oxford:

Layers 6 and 5: Quercus.

Layer 4b: Prunus spinosa.

Layer 4: Quercus.

Layer 3a: Quercus (abundant), *Prunus spinosa* (rare), *Corylus*, *Fagus*, *Fraxinus*.

Layer 3: Quercus, *Prunus spinosa*.

Layer 2a: Fagus, *Helianthemum* (probably).

The dominance of oak was to be expected, but beech is rare from British Neolithic sites.³ Dr. Dimbleby also examined samples of layer 6 for pollen, but found no countable grains.

Shells

Specimens were found only in the layers listed below, and were very kindly identified and commented on by the Rev. Professor L. W. Grensted:

I do not think that there is anything to make contrast with our present climate possible. The shells might well have lived today.

Assuming that they are a fair sample, they suggest open grassland—not particularly dry (as the top of Boar's Hill would be)—rather than woodland near the ditch. This would suit the colour form of *C. nemoralis* (wholly unbanded and one banded—probably pale and yellow shells), and the presence of *H. itala* and *T. hispida*.

C. hortensis (mainly if not entirely of 5 banded forms) is more of an uncertainty. Probably it was more in colonies, and perhaps in places with more vegetation (or cover under stones etc.).

¹ *Ibid.* viii, 476.

² Piggott, *Neolithic Cultures* (1954), pp. 28, 47.

³ *Loc. cit.*, p. 8.

The big *C. nemoralis* in layer 3 and the rather smaller forms (with *C. hortensis* tending to pyramidal forms) in layer 3a, give a slight suggestion for rather moister and more lavish conditions for layer 3.

	Layer				
	2a	3	3a	4	4a
<i>Cepaea nemoralis</i> L. . .	I	c. 70	Many	I	I
<i>Cepaea hortensis</i> Mull. . .	I	c. 10	Many	I	I
<i>Helicella itala</i> L. . .	I	6	3	..	I
<i>Trichia hispida</i> L. . .	I	2
<i>Retinella nitidula</i> Drap.	I	2

Note: Sherds of shell-gritted Abingdon ware from the 1926-7 excavations were submitted to Dr. K. S. Sandford, Dept. of Geology and Mineralogy, Oxford, who very kindly reported as follows:

The fragments of shell are, I think, certainly of fresh-water bivalves which are common in the Thames nowadays, and are turned out in great numbers when any cleaning of the river is done. They are up to a few inches long and are commonly known as 'freshwater mussels', but are in fact *Anodons* and *Unios*.

II. ANALYSIS OF THE POTTERY

Before considering the stratification, one is bound to note that the Abingdon ware from the site as a whole may be simply divided—into that with shell grit and that without.

An analysis of the 1926-7 finds is made below in detail, as befits a type-series of national importance.¹ Summarily, it is worth noting that the differences between the two main types extend to rim-form and, less markedly, decoration; that there are some reasons for distinguishing them stratigraphically; and that the type called no. 2 ware occurred predominantly at site I, Dorchester, Oxon.² and in pit D at Abingdon.³ These distinctions suggest a minor cultural variation, but they are no more likely to represent a major difference than, say, the use of various types of ware on an Iron Age A site.

The paste and appearance of *shell-gritted* Abingdon ware have been described in detail by Mr. Leeds. (It is only worth stressing in passing the normally great density of the grits, circumferentially laminated, making a structure much tougher than it appears.)⁴

Of the 243 rims of this ware, 87% are heavy, comprising 58% *angular*, either

¹ Sherds from the 1926/7 excavations have been fairly widely dispersed to various museums. The collection in the Ashmolean Museum contains some 280 rims, apparently the largest number of any comparable English series. Cf. Windmill Hill (172), Maiden Castle (100), Whitehawk (93), Hambury (90), Trundle (57). Information kindly given by Mr. W. E. V. Young and Miss I. F. Smith.

² Atkinson, Piggott, and Sandars, *Excavations at*

Dorchester (1951), pp. 108-9. The possible exception is sherd no. 51 of corky ware.

³ See p. 23, n. 4. The relative proportions of the wares here and at site I, Dorchester, are all the more striking if it is borne in mind that at Abingdon, generally, shell-gritted rims were more than six times as numerous as those of No. 2 ware, body sherds still more so.

⁴ *Ant.* xxix, 236-7.

T-headed (36% : nos. 2 and 7) or sharply bent outwards (22% : no. 6)¹ and 29% rounded, either of soft (14% : no. 3), pointed (11% : no. 9), or overhanging shape (4% : no. 10). All varieties of plain or light rims (e.g. nos. 11 and 12) make only 13% of the total.²

There are sherds of round bases but none of flat ones. Globular round-based vessels with a fairly even convex curve occurred,³ but the majority seem to have been deep with rather vertical walls and presumably a sudden curve inwards at the base.⁴ Concave walls are rare. There is no evidence for vessels with a continuous S-curve, and shouldered ones were probably not common. Of the 12 shouldered sherds, 4 are only mouldings or show little or no angle between neck and body (e.g. no. 5), but 6 show a mild angle (e.g. 3, 4, and fig. 5, A), while 2 show a sharp one (fig. 5, B and C). Thus, besides weakly carinated globular bowls,⁵ some of angular and shallow shape must have been present. (No. 12 may have been the rim of such a vessel.)

Decorative schemes were constructed from punctured impressions, generally made vertically but sometimes obliquely (e.g. no. 14);⁶ from impressions of a notched stamp (e.g. no. 3); and from incised lines and grooves (e.g. nos. 4 and 15). Burnished patterns and rippling⁷ are absent. The most frequent arrangement is in stripes, often transversely or diagonally on the rim (nos. 3, 7, 9, and 15), or emphasizing the necks (no. 4), handles,⁸ or shoulders (fig. 5) of the vessels; some of the impressions on the rims are like twisted cord (no. 9), but were made with some other kind of tool. Panels are noteworthy motives (nos. 15 and 16); curves occur (nos. 9 and 17). Two sherds are reminiscent of Rinyo-Clacton (Groove) Ware (no. 18),⁹ and one has light finger-nail decoration (no. 19).

Of the *non-shell-gritted* wares, a small number of sherds are of *corky ware*, including fifteen rims, nine of which are light. The corky appearance of some of these seems to have been caused by the weathering of shell grit, although this presupposes extraordinarily acid conditions in a calcareous soil. The vesicular appearance of others might have been caused when firing, by the burning out of inflammable grits, partial contraction, or the formation of gases. (Both the main types of ware have a slightly vesicular section.)

The remaining *non-shell-gritted* sherds may be grouped together, and are of greater significance. Mr. Leeds distinguished flint-gritted, sand-gritted, and friable sand-gritted sherds.¹⁰ When these are viewed in mass, there seems no reason to doubt that they form together a second main type of ware, easily distinguished

¹ Some like nos. 6 and 14 have an insignificant inner flange.

² The four inverted rims are not accentuated, and come on the borderline for this classification. No. 13 is classed as heavy.

³ *Antiq. Journ.* viii, pl. LXXIV, fig. 1c, and 473, fig. 4.

⁴ *Loc. cit.* vii, 454, fig. 8b.

⁵ Fig. 3, no. 9, may have been the rim of such a vessel. For shape, see *Antiq. Journ.* vii, pl. LIII, fig. 2c.

⁶ Liddell (*Ant.* iii, 289) showed that some of these impressions could have been made with a goose-

quill and with the bones of a magpie and a hedgehog. It seems possible to the writer that a wooden tool was used in some cases and a flint with serrated edge in others.

⁷ Organized patterns, like on no. 27, as distinct from haphazard marks.

⁸ *Antiq. Journ.* viii, pl. LXXIV, fig. 2a.

⁹ And *loc. cit.*, pl. LXXIV, fig. 2b.

¹⁰ *Antiq. Journ.* vii, 450-1. The friable sand-gritted comprise the so-called ruddle pots, small cups with fugitive red slip.

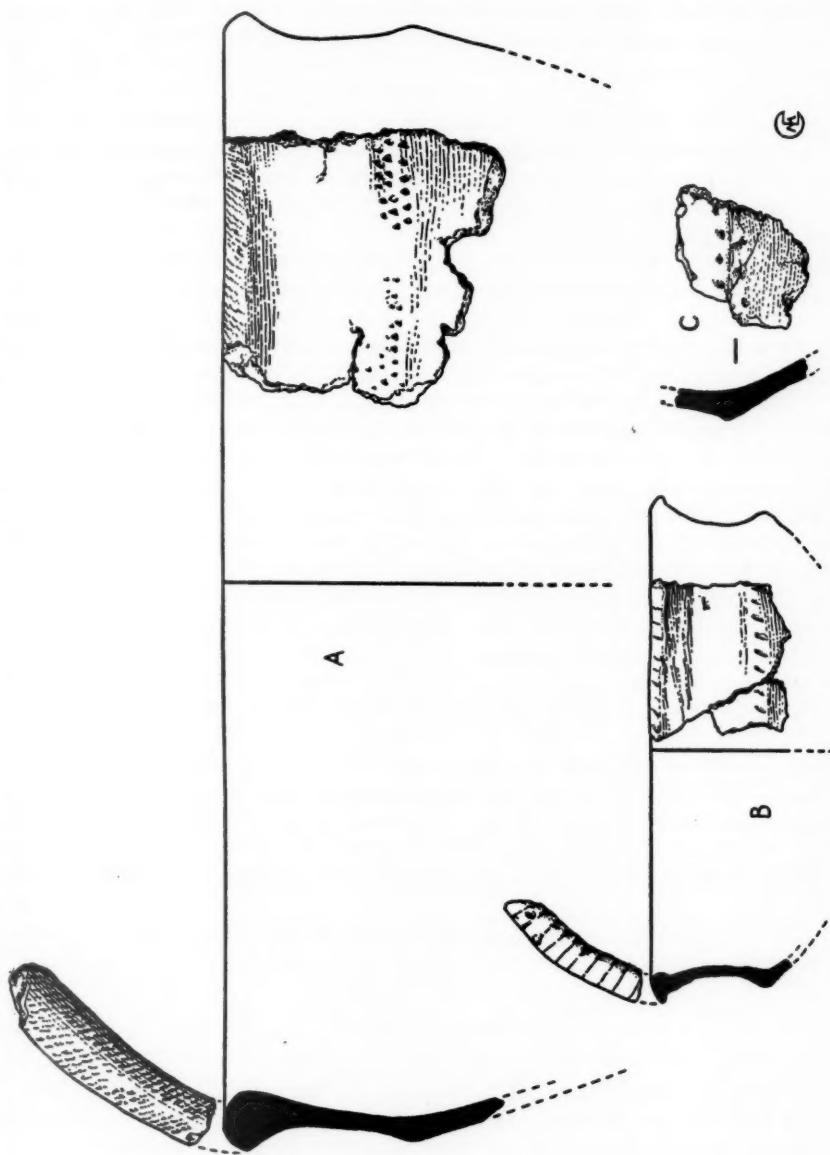


FIG. 5. Shell-gritted Abingdon ware shoulder sherds from inner ditch; B from N 2. Scale $\frac{1}{2}$.
Drawn by Mrs. M. E. Cox

by appearance and feel, called here for convenience *No. 2 ware*. The paste of this ware is to a varying degree sandy, and, although generally fine—some sherds are as fine and hard as the best Iron Age A—is often rough to feel. Grits of flint or quartz are normally small and sparse, or absent altogether to the naked eye on rapid inspection; but small quartz grains may be seen on close inspection of most sherds. A dull grey slightly vesicular break is common. The finest and hardest sherds are of this grey colour throughout, and have a tough burnished slip. This colour is common for surfaces, but brownish, reddish, and fawn tones occur. Some small cups had a fugitive red slip.

Twenty-four of the thirty-seven rims are light or plain—a reversal of proportion compared with the shell-gritted ware. The rim illustrated as no. 24 belongs to No. 2 ware alone; the remainder of the light or plain rims may be matched with more crudely made shell-gritted ones (e.g. nos. 11 and 12). The heavy rims of the two wares are also alike (No. 2 ware: nos. 25, 26, 28), but a small difference may be seen in the overhanging variety; in shell-gritted ware the shape is more or less continuously curved, while in No. 2 ware there is an angular type, cf. nos. 10 and 28).

The handling aids are restricted. Of the range which occurs on shell-gritted ware, the horizontal lug, plain (no. 25), or perforated vertically,¹ or pointed and tilted upwards² is present; but the perforated shoulder,³ the perforated knob,⁴ the vertically perforated handle type of lug (no. 3), the strip-handle springing from the rim,⁵ and the narrow handle⁶ are missing.

The range of size was similar to that of shell-gritted ware. As to shapes, by contrast, the six shoulder sherds show little or no change of angle between neck and body (e.g. no. 25). The weakly carinated globular type of bowl was present,⁷ and the more open angular type was lacking; but sherds like no. 20 may have belonged to bowls with S-curved profiles. There are round bases, but also a flat one (no. 34).

Decoration is less evident than on shell-gritted ware, being absent from the light rimmed sherds of both wares. On the heavy rimmed sherds, decorative schemes occur similar to those on shell-gritted ware (e.g. nos. 25 and 26), but the impressions resembling twisted cord are missing. Rippling (no. 27) and a burnished pattern (no. 28) are distinctive. Panels are absent. One sherd suggests a partially curved pattern (no. 29).

Both wares took a normal burnish; it was comparatively common on No. 2 ware, but rare on shell gritted.

III. STRATIFICATION

The 1954 excavation suggests (1) that shell-gritted ware alone was a feature of the constructional phase of the camp, (2) that No. 2 ware belonged to a later phase, and (3) that No. 2 ware was associated with Beaker ware. The reports and notes of the 1926–7 excavations strengthen these suggestions, for (1) three instances

¹ *Antiq. Journ.* viii, pl. LXXIV, fig. 2b.

² *Ibid.* vii, pl. LIII, fig. 2a.

³ *Loc. cit.*, fig. 1g.

⁴ *Antiq. Journ.* viii, pl. LXXIV, fig. 1c.

⁵ *Loc. cit.*, fig. 2a.

⁶ *Loc. cit.*, fig. 2f.

⁷ *Antiq. Journ.* vii, pl. LIII, fig. 2a.

record only shell-gritted ware in a primary position,¹ (2) one of these instances records flint-gritted ware (i.e. No. 2 ware) stratified above shell gritted,² and (3) in pit D relatively abundant sherds of No. 2 ware were associated with a rim sherd of a small Beaker or bowl of Beaker culture type (no. 32);³ also the flat base from this pit (no. 34) may have been an attempt to imitate a Beaker.⁴

Comparison of the sections of the inner and outer ditch also suggests that No. 2 ware may have come into use after the initial phase of the site. In an instance already quoted, No. 2 ware was described as found in the 'cultural layer'. This layer is shown in the section of H 2 as 'Blackened layer with pottery' and the overlying 'charcoal'.⁵ These features are the equivalent at the earliest of the lower 'charcoal' layer of N 3,⁶ which in turn is the equivalent at the earliest of layer 3 of the 1954 excavation.

However, the use of the two wares continued side by side, without any doubt.⁷

The position in the sequence of the Peterborough ware sherds (nos. 35, 36, and 37), of the axe fragments of Great Langdale rock,⁸ and of the sherds reminiscent of Rinyo-Clacton (Groove) ware (see above, p. 20) cannot be determined. Examination of the earthy matrix adhering to some of them was uninformative.⁹ However,

¹ (i) *Antiq. Journ.* vii, 450. (ii) Box of sherds (incl. one T-headed) in Ashmolean Museum labelled, 'N 2 from very bottom'. (iii) Two rims (cf. nos. 11 and 23, i.e. light rims) marked 'W. end bottom', in a box of sherds of both wares otherwise unlabelled. These rims are possibly some of the sherds from the 'earthy layer' of N 3 (*Antiq. Journ.* viii, 464).

Other sherds of shell-gritted and No. 2 ware are marked 'Trench Upper Layer'. One sherd of No. 2 ware is marked 'Bottom' but it appears to have come from a pit and not from the ditch.

² *Antiq. Journ.* vii, 450.

³ Inside the neck appear two badly eroded lines of impressions concentric to the rim. Cf. similarly placed impressions of cord on B Beaker sherd from Clifton Hampden, Oxon. (*Oxon.* xx, forthcoming). Cf. for shape bowl from Eynsham, Oxon. (*ibid.*). The sherd is orange throughout, and might conceivably be refired, but could hardly be refired Ebbsfleet ware (cf. shape: *Neo. Cult.*, p. 309, fig. 49, No. 5). An Abingdon ware type rim sherd (No. 33) also from pit D is orange throughout, matches Beaker ware reasonably (cf. B Beaker sherds from Long Wittenham, Berks. Ashmolean Museum 1936. 330) and not normal Abingdon ware in paste.

⁴ Flanged bases occur on A or late-looking B Beakers from the region, e.g. Cassington (*Oxon.* xvi, 3, fig. 2a), Eynsham (*Oxon.* iii, pl. iii, d), Cassington grave 1 (*Antiq. Journ.* xiv, 271). But possible Rinyo-Clacton (Groove) ware (*Neo. Cult.*, 340, fig. 57, No. 2) or Peterborough ware (*Oxon.* v, pl. 1, e) prototypes can also be suggested. Cf. also Lough

Gur Class II ware (*P.R.I.A.* lvi c, 334, fig. 16).

The finds from Pit D (*Antiq. Journ.* viii, 466, 474) are worth enumerating in detail: No. 2 ware: At least 28 sherds, incl. 2 heavy rims (cf. nos. 15 and 28), 5 light rims cf. nos. 21, 24, and 29), and 3 sherds (incl. no. 34) of a flat base. (I doubt whether this base came from a vessel with rim, cf. no. 28 as suggested in *Antiq. Journ.* viii, 474.) Corky ware: 5 sherds, incl. 4 heavy rims (cf. nos. 2 and 15). Shell-gritted ware: 2 sherds, incl. 1 light rim (cf. no. 29). Beaker ware: see note 3. Antler; 1 fragmentary polishing tool. Flint: 1 leaf-shaped arrowhead (*Antiq. Journ.* viii, pl. LXXII, fig. 1j), 11 flakes, mostly relatively large, and some with marks of use or dentate edges, and 1 two-edged bifacially retouched flake, which Professor Clark has suggested to me may be a stage in the making of a barbed and tanged arrowhead. It may only be coincidental (i) that the leaf-shaped arrowhead is a variant (*loc. cit.*, p. 467), and (ii) that corky ware also occurred at site I, Dorchester.

⁵ *Antiq. Journ.* vii, 442-4.

⁶ *Ibid.* viii, 465.

⁷ See p. 23, n. 1. Finds from other pits include both types of ware, and both came from H 4—the only hearth from which sherds were recorded. Judging by *Antiq. Journ.* vii, 441, fig. 2, this hearth was at the top of the 'cultural layer'.

⁸ Keiller, Piggott, and Wallis, *P.P.S.* vii, 60.

⁹ The matrices of the Peterborough ware sherds and of one of the axe fragments (*Antiq. Journ.* viii, pl. LXXII, fig. 1p) matched layer 1 of the 1954 excavation best in colour. That of another axe fragment was in colour between layers 1 and 2.

the use of No. 2 ware overlapped with that of Groove ware at site I, Dorchester, Oxon.,¹ and shell-gritted Abingdon ware may stand in parental relationship to some of the local shell-gritted Groove ware.² Peterborough culture activity was secondary to that represented by No. 2 ware at the same Dorchester site,³ and the association of axes of Great Langdale rock with that culture seems apparent.⁴

It is reasonable to assume that the Secondary Neolithic sherds and the axe fragments of Great Langdale rock were late in the sequence at Abingdon.

IV. THE RELATIONSHIP OF ABINGDON WARE TO POTTERY FROM OTHER SITES

The suggested sequence has similarities to those of other deeply stratified causewayed camps, e.g. Windmill Hill, near Avebury, Wilts., and Maiden Castle, near Dorchester, Dorset, in that it shows a homogeneous primary occupation succeeded by a ferment of various elements. At Windmill Hill,⁵ a ware representative of Piggott's Early Neolithic phase⁶ was primary; shell-gritted ware joined it at the middle of the sequence—ware according to Piggott's suggestion of Thames valley origin since reminiscent of that found at Abingdon⁷ (which he assigns to his Middle Neolithic phase). Beaker and Secondary Neolithic wares joined these wares at the end. Fragments of axes of Great Langdale rock came from the 'upper levels',⁸ although not in 'precise' relationship with Peterborough ware.⁹ Thus, the Abingdon sequence appears to run parallel with the second half of the Windmill Hill sequence.

Now, if one regards the shell-gritted ware from Windmill Hill as derived from the Thames valley, it is questionable whether the beginning of Abingdon should not be placed in the Early Neolithic phase. Some time must be allowed for use of the typical shell-gritted ware in the Thames valley before it reached the Marlborough Downs. The question is how this period of time can be compared with that represented by the difference in position in the outer ditch at Windmill Hill between the primary Neolithic and the shell-gritted ware.¹⁰

On the other hand, Abingdon could safely be given a beginning in the Middle Neolithic phase if one assumed that the movement was the reverse, i.e. from Wiltshire to the upper Thames. Which way was it? The answer to this question involves others of greater importance, which can only be answered by making a review of the major comparable assemblages.

It is best to begin by comparing Abingdon ware and the shell-gritted ware of

These comparatively dark tones might correspond to one of the 'cultural layers'; on the other hand, the 'upper filling' was described as having a 'black tinge' (*Antiq. Journ.* viii, 461).

¹ *Loc. cit.*, p. 17.

² Thomas, *Oxon.* xx, forthcoming.

³ *Loc. cit.*, p. 17.

⁴ Stone and Wallis, *P.P.S.* xvii, 119.

⁵ *Neo. Cult.*, pp. 70-72; cf. *Arch. J.* lxxxviii, 82.

⁶ See *Neo. Cult.*, pp. 373-6, for the content of the Early Middle, and Late Neolithic phases.

⁷ *Loc. cit.*, p. 72.

⁸ *Neo. Cult.*, p. 311.

⁹ *P.P.S.* vii, 69.

¹⁰ The outer ditch was 8-9 ft. deep. The mass of shell-gritted ware was not apparently found below 6 ft., but one typical rim sherd was found at 6-7 ft. and another (cf. fig. 4, no. 24) at 7-8 ft. The ditch of Wor Barrow, Handley Down, Dorset, was 12-13 ft. deep, and a little steeper. Pitt-Rivers found that it had silted to a depth of 2½ ft. in the centre in four years (cf. *Neo. Cult.*, 23, fig. 4, bottom and *Excavations* . . . , iv (1898), 24, left).

Windmill Hill. It may not be generally realized that about half of the total number of the rims found at Windmill Hill appear to have been of this ware. Their resemblances to those of Abingdon are certainly close. All the leading Abingdon types can be matched, although the heavy rims are less in evidence (some 50 per cent. of the total); of these, the rounded type (cf. no. 3) and the type sharply bent outwards (cf. no. 6) are the most common. Sherds of at least one shouldered open bowl occur, reminiscent of bowls from Whitehawk (see below, p. 27); sherds with weaker shoulders, similar to some from Abingdon, are also present. The warm grey slip which was a feature of Abingdon, may be matched exactly, as may the typical Abingdon shell-gritted paste.

The Windmill Hill pottery, however, is more austere in decoration. The most common motive is of lightly incised stripes across rim and shoulder. The punctured impressions are shallow and insignificant, and their variety, as seen at Abingdon, is lacking. The stamped impressions, including those resembling twisted cord, and the broad incisions and grooves are missing.

It is hardly necessary to stress that these comparisons are between Abingdon ware and the shell-gritted ware at Windmill Hill. The Early Neolithic sherds of Windmill Hill are of course stone-gritted; they do not match Abingdon No. 2 ware well in paste, far less in other features. Featureless sherds of a paste comparable with that of No. 2 ware, although lacking its quartz grits, occurred in the outer ditch at Windmill Hill—apparently not at the bottom, although stratified *below* the mass of shell-gritted sherds with Abingdon features. Thus the suggested relationship at Abingdon between shell-gritted and non-shell-gritted ware may have only local significance.

Further westwards, pertinent comparisons have been made between Abingdon ware on the one hand, and Class 1 and 1a ware from sites adjoining Lough Gur, Co. Limerick. These are predominantly stone-gritted, although a corky ware is present.¹ Deep and shallow bowls occur.² Shoulders and heavy decorated rims are outstanding features.³ The rims are exaggerated in excess of those of any English site.⁴ One type of T-headed rim with upwards-flaring inner flange can be matched at Windmill Hill but not at Abingdon.⁵ Small bowls with red surface and a grey break are a feature of all three sites.⁶

Of the decorative schemes, simple transverse hatching on the rim can be matched at all three sites; double rows of hatching⁷ can be matched at Windmill Hill and Abingdon, but greater numbers of rows⁸ and Z-curved lines⁹ are peculiar to Lough Gur. Chevron hatching on the rim is also a Lough Gur feature.¹⁰ Impressions resembling those of cord can be matched at Abingdon,¹¹ and certain criss-cross motives are reminiscent of the burnished patterned sherd from the same site.¹²

¹ Ó Ríordáin, *P.R.I.A.* lvi, c, p. 327.

² *Loc. cit.*, p. 329 fig. 12.

³ e.g. *loc. cit.*, p. 317, fig. 8.

⁴ e.g. *loc. cit.*, p. 318, fig. 9 no. 5.

⁵ e.g. *loc. cit.*, no. 4.

⁶ *Loc. cit.*, p. 327.

⁷ e.g. *loc. cit.*, p. 331, fig. 14, no. 11.

⁸ e.g. *loc. cit.*, no. 3.

⁹ e.g. *loc. cit.*, p. 391, fig. 33, no. 10.

¹⁰ *Loc. cit.*, p. 331, fig. 14, no. 9. But it occurs in an assemblage of sherds with many Abingdon ware features from the Whiteleaf Barrow, Monks Risborough, Bucks. *P.P.S.* xx, 223, fig. 5, no. 4.

¹¹ *Loc. cit.*, nos. 7 and 12.

¹² *Loc. cit.*, nos. 16 and 18.

Finger-nail impressions occur.¹ Decoration on the neck, which is common at Abingdon, is missing. Decoration below the shoulder,² however, is not a feature of Abingdon or Windmill Hill, although it occurs at Whitehawk and in East Anglia.

While resemblances and differences may be found in both the English assemblages which have been quoted, the decorative methods in general at Lough Gur were more monotonous and more frequently confined to the rim than those of Abingdon; in this respect, the resemblance is closer to Windmill Hill.

Another ware which has been compared to Abingdon is the northern Irish *Lyles Hill ware*, as defined by Piggott.³ This is normally a stone-gritted ware, but corky sherds have been found.⁴ Here are heavy rims (including some T-headed),⁵ and apparently deep,⁶ globular⁷ or shallow bowls,⁸ with or without shoulders—some of open type with flaring profiles reminiscent of Windmill Hill or Whitehawk.⁹ Typical of this ware and of Lough Gur I and Ia wares is the stepped shoulder;¹⁰ it occurs at Abingdon (no. 16), but in less exaggerated form.

Decoration is austere, being virtually confined to rippling on the rim, and above and below the shoulder.¹¹ Rippling occurs at Windmill Hill, and on Abingdon No. 2 ware, but not on shell-gritted ware. The transverse stripes in which the rippling is arranged on the rim are of course typical of the Irish and British sites already mentioned. Decoration inside the neck cannot be matched at Abingdon, but occurs at the Trundle and elsewhere (see below, p. 27).¹² A notched shoulder typical of Abingdon occurred at Lyles Hill.¹³ Evans has compared the handle which he found there with Yorkshire and Abingdon examples,¹⁴ and mentioned Iberian parallels quoted by Leeds.¹⁵

Moving southwards to Iberia, Childe and Ó Ríordáin have compared rim profiles from sites at the mouth of the Tagus with those from Abingdon¹⁶ and Lough Gur.¹⁷ The undecorated rims from Vila Nova de S. Pedro, near Cartaxo, Portugal, published by Colonel do Paço and Miss Costa Arthur, are remarkably similar to those from Abingdon and Windmill Hill.¹⁸ According to Colonel do Paço, the rims were found in (among other localities) a layer which was *pre-Bell-Beaker*.¹⁹

¹ *Loc. cit.*, p. 373.

² *Loc. cit.*, pl. xxix.

³ *Neo. Cult.*, p. 167.

⁴ Audleystown Cairn: Collins, *U. J. A.* xvii, 23.

⁵ e.g. Evans, *Lyles Hill* (1953), p. 38, fig. 13, no. 16.

⁶ *Loc. cit.*, fig. 12, no. 10.

⁷ *Loc. cit.*, no. 8.

⁸ *Loc. cit.*, fig. 11, no. 1.

⁹ *Loc. cit.*, no. 3. By *open* is meant with shoulder diameter less than rim diameter; by *closed* is meant the reverse. By *upright* is implied roughly equal diameters.

¹⁰ e.g. *loc. cit.*, fig. 13, nos. 14, 40, 41.

¹¹ *Loc. cit.*, fig. 14, nos. 46–51.

¹² *Loc. cit.*, no. 53.

¹³ *Loc. cit.*, no. 52.

¹⁴ *Loc. cit.*, p. 36. Cf. Abingdon: *Antiq. Journ.* viii, pl. lxxiv, fig. 2f.

¹⁵ *Ibid.* vii, 458. They are considered by Childe, however, to be later than the period in

question and to 'represent a parallel to the Almerian Bronze Age' (*Dawn* . . . (1947), 271.)

¹⁶ *Revista Guimarães*, lx, 7, 8.

¹⁷ *Loc. cit.*, p. 454.

¹⁸ *O Instituto*, cxv, iii. Cf. Leisner and Leisner, *Antas . . . de Monsaraz* (1951), pl. xxxviii, no. 3, from an indeterminate dolmen. Since the inventory contained a sherd of a flat-based 'saucer', it is presumably to be dated later than the passage-graves with polygonal chambers, and contemporary with the *tholoi* and with the Palmela culture of the coast (with Bell Beakers). Cf. also from Cascais near Lisbon: do Paço, *As grutas do Poço Velho ou de Cascais* (1942), pl. xxviii c. (*Comm. dos serviços geológicos de Portugal*, xxii).

¹⁹ The finds from this *castro* represent different periods and have been mixed by cultivation. Stratigraphical indications were, however, found in excavating the wall (*Revista Brotéria*, liv, 9).

Also in the layer were sherds of plain and shouldered bowls,¹ sherds with curvilinear channelled decoration, and others with burnished criss-cross and chevron patterns. Punctured, finger-nail, and reed impressions occurred. Flat based vessels were present. *Almagre ware*, which is not precluded from being of early date,² was also found and was possibly contemporaneous with this layer. Hollow-based arrow-heads were typical;³ a few scraps of copper were found.

Returning to England and moving east of Abingdon, one has Piggott's groups of *Whitehawk* and *East Anglian ware*.⁴

First, however, one must consider the assemblage from the Trundle, near Goodwood, Sussex, which shows some resemblances to that from Abingdon. Only stone-gritted ware occurred. Shoulders were present, decorated in characteristically Abingdon fashion.⁵ Heavy rims do not seem to have been frequent,⁶ and no real T-headed ones occurred. Rims were decorated with transverse stripes, typical of the sites already mentioned.⁷ Decoration inside the neck recalls Lyles Hill but also the primary Neolithic of Windmill Hill, and occurs also at Whitehawk⁸ and Mildenhall⁹ (see below, p. 28). Decoration in rough panels¹⁰ and by multiple curves¹¹ recalls Abingdon.

At Whitehawk, near Brighton, Sussex, stone- and shell-gritted sherds were found, also sherds with both kinds of grit. The deep bowl occurred,¹² reminiscent of Abingdon, but most of the shapes were more open,¹³ recalling those of Lyles Hill and the example from Windmill Hill. The shoulder is typical and is decorated in typically Abingdon fashion.¹⁴ Heavy rims, including T-headed ones, were present;¹⁵ stripe decoration of the rim was frequent. Typical of Abingdon are the closely spaced rounded impressions,¹⁶ the stamped impressions,¹⁷ and those possibly made with a bone point;¹⁸ panelled¹⁹ and curved²⁰ decoration recall the same

¹ The sherd published (*O Instituto*, cxv, fig. 4, no. 42) seems to have come from a closed type of vessel. Cf. for form Leisner, *loc. cit.*, pl. v, no. 6, from a polygonal passage-grave. This type of bowl seems to have been fairly common at any rate in the Monsaraz region; cf. pl. vii, no. 31, xx, no. 9, xxvii, 29, etc.; cf. also from Cascais, *loc. cit.*, pl. xxvii b; also from Algarve and Almeria in passage-graves, Leisner & Leisner, *Die Megalithgräber der Iberischen Halbinsel* (1943), pl. 81, 3, no. 19, and pl. xii, 2, no. 2 (straight-necked). Open *unshouldered* bowls also seem to have been common (e.g. *Antas...*, pl. xxvi); Leisner relates some of the more flaring types to Beaker culture bowls (e.g. *loc. cit.*, pl. xx, no. 1. Cf. from Almeria, *Megalithgräber*, pl. vii, 2, no. 20). Open bowls with shoulder approximately midway up the body or higher like the Irish and British examples seem to have been rare (cf. from passage-grave, Marcella, Algarve, *Megalithgräber*, pl. lxxvi, no. 47; another from Cascais was flat-based, *loc. cit.*, pl. xxviii c).

² Discussed by Leisner, *Antas*, pp. 81-84.

³ Particularly the type with 'Eifel Tower' profile. *Revista Brotéria*, liv, 21, fig. 14, e.g. no. 5.

⁴ *Neo. Cult.*, pp. 72-74.

⁵ Curwen, *S.A.C.* lxx, 50, pl. viii, no. 8.

⁶ *Loc. cit.*, p. 53, pl. x. Miss Smith very kindly gave me information about their frequency.

⁷ *Loc. cit.*, pl. ix.

⁸ *S.A.C.* lxxi, 65, pl. vi, no. 10.

⁹ Briscoe, *Proc. Camb. Arch. Soc.* xlvii, 20, fig. 4 b.

¹⁰ *S.A.C.* lxx, 50, pl. viii, 2.

¹¹ *S.A.C.* lxxii, 136, pl. xi, 14.

¹² Ross-Williamson, *S.A.C.* lxxi, 71, pl. x, no. 28.

¹³ *Loc. cit.*, p. 70, pl. ix.

¹⁴ *Antiq. Journ.* xiv, 113, fig. 14 and 115, fig. 23.

¹⁵ *S.A.C.* lxxi, 72, pl. xi, no. 35, etc. They were not so common as at Abingdon. I am grateful to Miss Smith for giving me information as to their frequency. She tells me that some of the T-headed rims may be undecorated Ebbsfleet ware.

¹⁶ *Antiq. Journ.* xiv, 113, fig. 6; cf. *ibid.* viii, pl. lxxii, fig. 20.

¹⁷ *Ibid.* xiv, 118, fig. 41.

¹⁸ *S.A.C.* lxxi, 66, pl. vii, 16.

¹⁹ *Loc. cit.*, p. 71, pl. x, no. 28.

²⁰ *S.A.C.* lxxvii, 76, fig. 2; *Antiq. Journ.* xiv, 113, fig. 8.

site. Finger-nail impressions¹ occurred on both sites. Rippling recalls Lyles Hill.²

The decoration at Whitehawk is comparable in variety with that at Abingdon, if not greater than it; it is certainly more extensive, occurring not only on the rim, neck, and shoulder, but also below the shoulder and inside the neck.

A comparable extension of decoration may be seen on *East Anglian ware*, where a zone below the shoulder is typical.³ Globular bowls occur,⁴ also the shouldered one with upright walls;⁵ but the closed type of shouldered bowl also occurred. The stepped shoulder, typical of Lyles Hill, Lough Gur, and Abingdon is a feature. Heavy rims are commonplace, and at Mildenhall, Suffolk, were probably as frequent as at Abingdon.⁶ T-headed rims occur. Bold stripes and impressions feature on the rims and bodies of the vessels⁷ comparable with those of Abingdon rather than with the light hatching and prick-marks of Windmill Hill. Hatched chevrons on the rim recall Lough Gur.⁸ One sherd from Mildenhall has curved decoration.⁹

The Irish and British assemblages mentioned above belong to Piggott's now abandoned classification of A 2. Their main features are variations on a theme of typically heavy-rimmed, thin-walled bowls with transverse decoration on the rim, quite often shouldered, and if so often open or upright. It seems beyond the range of probability to derive these features from the typically light-rimmed, thick-walled bowls lacking decoration on the rim, rarely shouldered, and if so closed, which are characteristic of Hembury and Maiden Castle,¹⁰ or of the primary layer at Windmill Hill. One must certainly take account of Childe's caution in emphasizing the essential homogeneity of the Western Neolithic culture in these islands, implying that 'divergences of tradition' are to be expected from 'regional groups . . . to a large extent mutually isolated'.¹¹ None the less, the conclusion that the assemblages which I have discussed represent an immigrant cultural strain distinct from those seen at Hembury and Maiden Castle or in the finds from the primary layer at Windmill Hill seems strongly arguable.

If one admits the possibility of this further immigrant strain, the Vila Nova de S. Pedro finds suggest that its area of origin may have been the Atlantic seaboard, in contrast to the northern French area of origin suggested for the variants of Western culture seen at Hembury and in the primary layer at Windmill Hill.¹²

Now, Ireland is more accessible to the Atlantic seaboard than most of southern England, and it would be reasonable to expect such an immigrant cultural strain to show an early stage there, and later stages in Wessex and East Anglia. In fact, typologically the assemblages which I have discussed argue for such a development. They fall into a series, showing greater variety and more extensive and

¹ *S.A.C.* lxxi, 64, pl. iv, no. 2.

² *Loc. cit.*, p. 64, pl. iv, no. 1.

³ Mildenhall, *loc. cit.*, pp. 20-22, figs. 4 and 6.

⁴ *Neo. Cult.*, pp. 73, fig. 11, no. 4.

⁵ Mildenhall, *loc. cit.*, fig. 4c.

⁶ I am grateful to Miss Smith for letting me examine a large unpublished collection from Mildenhall in the Institute of Archaeology, and for giving

me access to her notes on the frequency of types of rim.

⁷ Mildenhall, *loc. cit.*, figs. 3, 4, 6.

⁸ *Inst. of Arch. 10th Ann. Rep.*, p. 31, fig. 2, no. 1.

⁹ Information kindly given by Miss Smith.

¹⁰ *Neo. Cult.*, pp. 67-70.

¹¹ *Prehistoric Communities* (1949), p. 38.

¹² *Neo. Cult.*, pp. 97-99.

bolder use of decoration, as one moves in a generally westerly direction: Lyles Hill—Lough Gur and Windmill Hill—Abingdon—Whitehawk and East Anglia.¹ No question need be raised as to whether any are parental one to the other; they can simply be seen as the successive shoots of a common stem. Nor is it essential to seek one single point of origin in the western parts of these islands.²

Now, this view of typological development indicating a cultural element which impinged on these islands from the west and was transmitted across England from west to east, is consistent with evidence suggested by stratigraphy. In the series discussed, curves and panels appear in major assemblages at Abingdon and farther east.³ Now, these features can reasonably be derived from Iberian and Breton features, which express themselves in the Beacharra ware of northern Ireland and eastern Scotland.⁴ Evidence from excavations of northern Irish chambered tombs carries some suggestion of an earlier initial date for Lyles Hill ware than for Beacharra ware.⁵ This, in turn, suggests an earlier date for Lyles Hill ware than for Abingdon, Whitehawk, and East Anglian wares.

Two subsidiary inferences can be made, beyond the scope of the argument here: (1) The Yorkshire bowls with heavy rims and their associated shouldered and open bowls can be derived from Irish sources.⁶ (2) The often-discussed open shouldered bowls of the Michelsberg culture can be placed, if one so desires, at the end of a hypothetical north-western European series instead of at its beginning. Both these propositions fit other evidence better than their converses.

The strongest argument against regarding the assemblages which I have quoted as being more than local varieties of a single British and Irish cultural strain (which would include the primary Neolithic of Windmill Hill as well as all other assemblages of Western type) is that all British and Irish assemblages of Western origin include the leaf-shaped arrowhead, to the exclusion almost of other types. According to statistics quoted by Childe, based on the occurrence of various types of arrowhead on continental sites, this hypothetical single strain should find its origin in northern Gaul.⁷

Now, the arrowhead characteristic of the pre-Bell-Beaker layer at Vila Nova de S. Pedro is hollow-based. However, the leaf-shaped type occurs⁸ (although not often) and is an early feature in southern Spain and Portugal.⁹ In these islands,

¹ The assemblage from the Trundle stands apart, being apparently closer than the others to the primary Neolithic of Windmill Hill.

² Typologically, the comparatively smaller assemblage from Clegyr Boia, Pembroke, should be earlier than Lyles Hill. Here are heavy rims (although no T-heads), and shouldered bowls including open ones. The rare decoration is confined to transverse hatching on the rim by grooving or finger-nail marks. Corky as well as stone-gritted wares occurred; calcite was used, as at Lough Gur and Vila Nova de S. Pedro. Reddish as well as grey sherds occurred. Williams, *Arch. Camb.* cii, 34-42.

³ A shell-gritted sherd from the Nympsfield Long Barrow, Glos., reported as Neolithic B but of

Abingdon ware, has concentric semicircles on the rim. Clifford, *P.P.S.* iv, 193, fig. 4, no. 20, 205, 211.

⁴ *Neo. Cult.*, pp. 187-8. See also Piggott, *L'Anthropologie*, lviii, 8-14 for the French and Breton material.

⁵ *Neo. Cult.*, pp. 168-70.

⁶ Atkinson favours such a derivation (*Ant.* xix, 176). Piggott favours the reverse, and discusses the arguments for and against in *Neo. Cult.*, pp. 116-17.

⁷ *Arch. J.* lxxxviii, 43.

⁸ Jalhay and do Paço, *Actas . . . Sociedad Española de . . . Prehistoria*, xx, pl. xi, nos. 1-5.

⁹ *Megalithgräber*, 425-8, 432-4, pl. CLKIII. Good matches with British types seem rare in Portugal, but the Portuguese type with concavo-convex

by contrast, the hollow-based arrowhead is rare apart, however, from Ireland, and especially northern Ireland, where it occurs densely.¹ There was an example at Lough Gur,² and another at Lyles Hill.³ Moreover, bifacially worked flints from Vila Nova de S. Pedro⁴ are similar to the javelins of Lyles Hill,⁵ Windmill Hill,⁶ and Mildenhall.⁷ There was a possibly fragmentary specimen at Abingdon,⁸ and others were found at Hembury.⁹

Thus the evidence presented by the flint types would not be strained by the argument based on the pottery.

The question posed on page 24 (Which way was the movement, which is implied by resemblances between the shell-gritted wares of Windmill Hill and Abingdon?) may now be answered. It was from west to east. It was part of a movement into these islands of an immigrant cultural strain distinct from that represented by the primary Neolithic of Windmill Hill. At Lyles Hill certainly, and possibly at Lough Gur, it began in Piggott's Early Neolithic phase; at the latter site it appeared as pre-Bell-Beaker. At Windmill Hill and Abingdon, it came into Piggott's Middle Neolithic phase, still pre-Beaker; Whitehawk belonged to the same phase. Occupation at Abingdon and Windmill Hill lasted into the Late Neolithic phase.¹⁰

Note: Since this report was written Miss I. F. Smith has published a description and analysis of pottery from a barrow on Whiteleaf Hill, near Princes Risborough, Bucks., showing resemblances to Abingdon, East Anglian, and Whitehawk wares—and in particular to Ebbsfleet ware, especially in certain rims (cf. this report, fig. 3, no. 13, and fig. 4, no. 24). *P.P.S.* xx, 221–8.

long edges and a slight process on one or both edges at the widest point in plan can be matched in northern Ireland; *Cascais*, pl. xv g; *Megalithgräber*, 426, fig. 14, no. 4.

¹ Buick, *J.A.A.I.*, 5th ser., v, 47. There are more than 55 Irish examples in the Ashmolean Museum, probably all from Co. Antrim.

² *Loc. cit.*, fig. 41, no. 12. But the same type was found with a bronze riveted dagger in a grave deposit at Aldbourne, Wilts. *W.A.M.* xxviii, 263.

³ *Loc. cit.*, p. 51, and fig. 20, no. 21.

⁴ e.g. *Actas* . . . , pl. ix, no. 5. Cf. *Cascais* . . . , pl. xv m.

⁵ *Loc. cit.*, no. 27.

⁶ Avebury Museum.

⁷ Information from Professor J. G. D. Clark, who also kindly examined the fragment from Abingdon, and gave his opinion that it might have been part of a javelin.

⁸ *Antiq. Journ.* vii, 447, fig. 5 a. Published as a dagger of Beaker Culture type.

⁹ *P.D.A.E.S.* i, 184, pl. xix, nos. 754, 936.

¹⁰ Fragments of greenstone (cf. Great Langdale) were found at Mildenhall, but unfortunately on the surface. *Loc. cit.* xlvii, 20.

TWO PLATES FROM A LATE SAXON CASKET

By DAVID M. WILSON

Two unique pieces of Late Anglo-Saxon silverwork of outstanding interest have recently been purchased by the Department of British and Medieval Antiquities of the British Museum. The pieces are plates from a house-shaped casket, or shrine, of a well-known British type.¹ They formed part of the collection of a Sussex doctor and were purchased from him by the dealer who sold them to the Museum: they are unfortunately unprovenanced, but from external evidence² it seems likely that they formed part of a Victorian collection. One of the pieces is rectangular and measures 12.6 × 5.2 cm., the other is rhomboid and measures along its longest side 12.1 cm., they differ also in their ornamentation which is carried out in a shallow carving, or graving, technique.³ (pl. v a).

DESCRIPTION OF THE ORNAMENT

The ornament of the rectangular plate (that which covered one of the two longer walls of the casket) consists of three wheel crosses surrounded by a billeted border and enclosing between the arms of each cross four triquetra interlaces: in the gores between the outer and the central wheels, within the border, are four similar triquetras, and inside the border at the four corners are what appear to be incipient interlace patterns. In the centre of each wheel is a hole; that in the centre being surrounded by what appears to be an incurving irregular collar; the appearance of the collar suggests that the holes were cut from original small domes or bosses. The rings of the wheel and the triquetras in the outer crosses are left plain but all the other elements are decorated with billeting. The plate has had a considerable amount of secondary handling and has been pierced altogether twenty-four times. The edges have been clipped and a small part of one corner of the plate is missing. The original holes are probably those in the four corners and in the four intervening triquetras as these are, in some measure, allowed for in the design.

The upper, or roof, plate is of more complicated design. It is divided by a saltire and bounded by a border. Although the top edge is badly clipped it is chamfered as though to suggest that it was originally bound by a ridge-pole.⁴ It is clear that the five holes pierced in the saltire carried rivets for the original attachment to the casket. These rivets must have been dome-headed, as on the Stockholm and Sutton brooches.⁵ The areas that would be under the domes are unornamented and there

¹ Cf. G. Swarzenski, 'An Early Anglo-Irish Portable Shrine', *Bull. Mus. of Fine Arts, Boston*, 1954, pp. 50 ff.

² When purchased the plates were mounted on a piece of nineteenth-century velvet in a Morland frame.

³ B. M. Inventory No. 1954, 12-1, 1 and 2: a short preliminary publication of these pieces has already appeared in the *B.M. Quarterly*, 1955,

p. 47. I am grateful to my colleagues Messrs. R. L. S. Bruce-Mitford and P. Lasko for help and advice during the writing of this paper.

⁴ e.g. A. Mahr, *Christian Art in Ancient Ireland*, i, 1932, pl. 18, 1 and 7.

⁵ Vide R. L. S. Bruce-Mitford, 'Late Saxon Disc-Brooches', *Dark Age Britain; Studies presented to E. T. Leeds*, London, 1956, pp. 171 ff.

are, for instance round the central hole, scratched circles similar to those found round the holes of missing rivets of this type on the Stockholm and Sutton brooches. In the lower panel of the saltire is a rather degenerate interlace ornament with, in the centre top, a human head, full face (fig. 1). The head is separated from the interlace but could be an integral part of the design: the interlace is speckled, perhaps merely to balance the interlace in the other fields, but perhaps in order to give it a zoomorphic character.

In the other panels are interlacing animals (fig. 1), tortuous almost to the point of meaninglessness. The nielloed speckling of the main parts of the animals' anatomy, the triangularity of the double contoured body and the placing of the head in one corner of the field are almost the only regularities. The animals are recognizable as

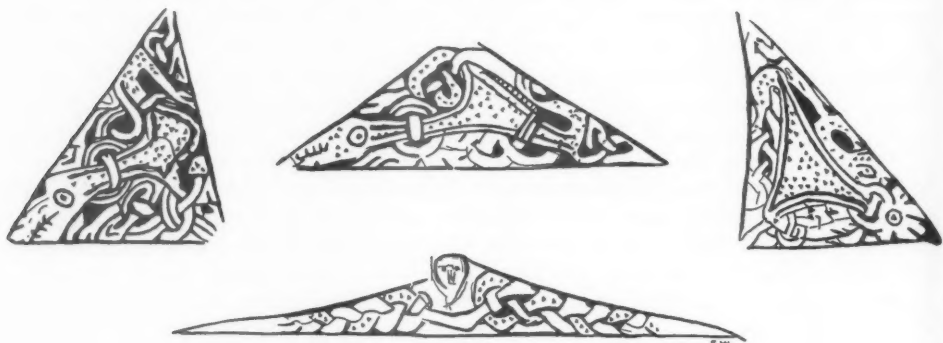


FIG. 1. Details of the ornament from the wall plate of the casket ($\frac{1}{4}$)

representations of a tailed quadruped of predatory aspect. Their heads have large round eyes and two of them have saw-like teeth, the same two animals have three definite, but formalized, feet. The third animal is much more degenerate and indistinct, its feet being difficult, if not impossible, to locate. The sub-triangular bodies of all the animals are defined by a double line (and in one case, partly, by a little beading) and contain a niello-filled speckling executed with the corner of a chisel: the limbs of the animals have only one defining line but some of them are speckled. An interesting feature, and one to which we shall return, is the interlaced ring on the extended neck of each animal, occurring at the crossing of a leg and the neck.

The engraving of both plates was originally filled with niello: the plates were submitted to Dr. H. J. Plenderleith, F.S.A., Keeper of the Research Laboratory of the British Museum who reported as follows:

The trapezoid plate: the niello was tested by three tests detailed by Moss (Conservation No. 2, 1953). These tests indicated that the niello is of the non-fusible type (Acanthite), which was used before the introduction of fusible mixed sulphide in about the eleventh century.

The rectangular plate: this bears no trace of niello.

If any such confirmation were necessary this analysis of the niello indicates the authenticity of the pieces: it seems hardly possible that a nineteenth-century forger would have the knowledge to use a technique of nielloing that went out of use in England in the eleventh or twelfth century.

DISCUSSION OF THE ORNAMENT

The workmanship of the two plates is crude but the craftsman belonged to a definite English school. The ornament of the bottom plate offers little trouble to the art historian, such roundels occurring for example on the magnificent thistle-headed brooch from Penrith¹ where four triquetras appear within a circular field, although on this brooch the equal-armed cross is missing. This is the closest, but by no means the only parallel. The cruciform division of such a round field, with interlace in each quadrant, occurs often in Saxon art. It appears, for instance, on fol. 7^r of the Stockholm *Codex Aureus* (late eighth century) and the triquetra itself is a very common feature at this period.² There are reminiscences here perhaps of such objects as the Witham pins,³ the Ixworth brooch,⁴ and even the Irish wheel-headed crosses. The secondary holes in the centre of each cross we have presumed to be pierced repoussé bosses, such bosses occur on the disc from the Igelösa hoard, Skåne, Sweden (fig. 2): this hoard which comprised some 10 lb. weight of coins and fragmentary silver has been dated to c. 1004, it was deposited not later than 1006.⁵ This form of boss does not occur to my knowledge elsewhere in Anglo-Saxon metalwork of this late period, and it is very probable that the form is skeuomorphic of the boss-shaped rivet-heads that appear on the disc brooches,⁶ and which almost certainly appeared on the roof plate of the casket.

It is perhaps possible to consider this plate in a wider context. It is noticeable in a cursory examination of the insular shrines known to us⁷ that it is usual to have a

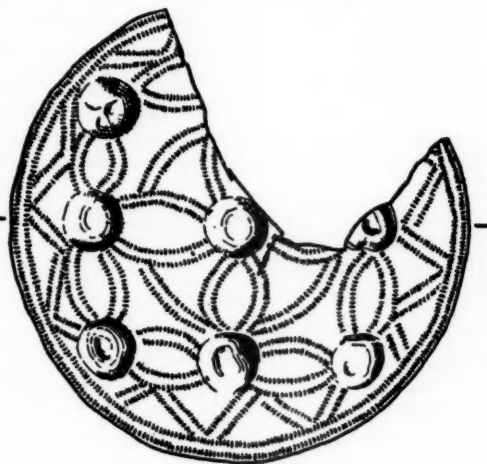


FIG. 2. Silver disc from Igelösa, Skåne, Sweden. (1)

¹ P.S.A. Lond. xxi, 68, fig. 2.

² e.g. on the Franks Casket (B.M. *Guide to Anglo-Saxon Antiquities*, pl. viii) and the Sutton, Isle of Ely, Brooch (vide B.M. *Quarterly*, 1952, p. 15) but see E. Cinthio, 'Anglo-Saxon and Irish style Influences in Skåne,' *Meddelanden från Lunds Universitets Historiska Museum*, 1947, *passim*.

³ B.M. *Anglo-Saxon Guide*, pl. ix.

⁴ J. Brønsted, *Early English Ornament*, Copenhagen, 1924, fig. 114.

⁵ I am grateful for this dating to Mr. R. H. M. Dolley, F.S.A., it is part of his unpublished work on the Swedish coin hoards.

⁶ e.g. Sutton, Stockholm, Beeston Tor, etc., vide Bruce-Mitford (1956), pp. 171 ff.

⁷ Swarzenski, p. 51, gives a complete list.

series of three roundels either on the wall or roof, or on both, of a shrine (the exception is the Shannon Shrine¹ which has squares instead of roundels). It seems therefore that we have here another rendering of the same motif; not with applied but with engraved roundels.

In tackling the ornament of the roof plate we must first discuss its layout. We have a field of trapezoid form which is divided into four by a saltire, at the intersection and extremities of which were bosses. The division of a plate into fields of ornament by means of lines drawn between bosses is closely paralleled in the late Saxon discs.² Parallels can also be drawn with a number of so-called 'Irish' penannular brooches which have a very similar division of fields, the same ribbing, the same bossing and roughly the same trapezoid field.

It is perhaps fitting to discuss some of the points raised by this very obvious parallel. Shetelig speaking of these brooches said:

[they] are certainly of Irish make, but it is equally certain that the system of decoration with the bands linking up the bosses on each of the terminals has no precedent in Irish work and obviously recalls that of the Scandinavian tortoise brooches.³

He acknowledges his debt in this statement to two great scholars George Coffey and Reginald Smith and reminds us that many of the tortoise brooches have similar silver bosses with lines dividing the fields, and implies a Norwegian origin for these details. It must, however, be pointed out that the method of division on these penannular brooches is more probably of Anglo-Saxon origin. The panelled style, divided by lines and bosses, is not Celtic but Saxon: it has a long history starting in the pagan period where it is most clearly seen, with bosses, on the pendant from Horton Kirby⁴ and on the Kentish disc brooches;⁵ and reaches its heights in the Late Saxon Period where we find for instance the panelling present on the Ixworth disc⁶ and the Stockholm brooch,⁷ on the Tassilo Chalice,⁸ and the Fejøl cup.⁹ The style of division of the fields on the roof plate is undoubtedly English. This is not the place to discuss whether these brooches are Irish or not: but the origin of the panels envisaged by Shetelig in Norway is untenable in the light of argument. Even if the brooches are of Irish manufacture, and their distribution would indicate this, the English influence in the ornament is very strong and can hardly be disputed.

The zoomorphic ornamentation of the roof plate presents a number of difficult problems. Many of its details are to be found in the Anglo-Saxon metalwork of the late period. The scratched human mask in the lower field, for example, is a rare feature, one of its most important occurrences is to be seen on the Sevington spoon, the deposition of which can now be dated c. 850.¹⁰

¹ *P.S.A. Scot.* xiv, 286.

² See Bruce-Milford (1956).

³ 'The Norse Style of Ornamentation in the Viking Settlements'. *Acta Archaeologica*, xix, 1948, 74.

⁴ *B.M. Quarterly*, xii, 1937/8, pl. xxiii, 4.

⁵ E. T. Leeds, *Anglo-Saxon Art and Archaeology*, Oxford, 1936, pl. xxxiii.

⁶ J. Brøsted, *Early English Ornament*, London/Copenhagen, 1924, fig. 114.

⁷ B. Nerman, *Det Fornida Stockholm*, Stockholm, 1922, fig. 15.

⁸ G. Haseloff, *Der Tassilokelch*, München, 1951, pl. 1.

⁹ J. Brøsted (1924), fig. 128.

¹⁰ *B.M. Anglo-Saxon Guide*, fig. 130: The old higher dating quoted, for instance, in the *Guide* is due to a misreading of a coin of Aethelred I by Hawkins in 1851; I am grateful to my colleague Mr. R. H. M. Dolley, F.S.A., for this revised dating.

In the other fields we are at once struck by the coarse nature of the design and craftsmanship, often the animals degenerate into complete abstraction, their limbs being unclear and even their heads being somewhat indefinite in form. The triangular stippled bodies of the animals take us straight in our minds to the Trehwiddle animals and to the speckling that so often appears in the Trehwiddle school. The connexion between the animals of the Trehwiddle horn mountings and the animals of this plate is at once evident.¹ In Trehwiddle style pieces the speckling is usually filled with niello, as in the case of our mounting, or, when the object is gold, gilded, or of bronze, it is left plain, as in the case of the Strickland brooch² and an unpublished pinhead from St. Mary's Abbey, York.³ The main limbs of the animals on this plate are also speckled, presumably as a representation of fur, but stylistically there is no other connexion between this plate and the Trehwiddle mountings, save the use of nielloed silver, which is of widespread occurrence.

As we look at the animals on this plate we get the impression that the artist has only imperfectly understood his subject. He has two ideas in his mind, the one of the Trehwiddle animal and the other a misunderstood idea of an interlaced animal of no regularity. The dark age artist usually thoroughly understood his work and it seems as though the artist of this piece was struggling with an idea that was illogical in his art. It is possible that he may have been copying another style and I think that in this we have a clue to the artistic idea behind these animals. The ring round the neck of the animal is a well-understood motif of the Ringerike style of art and it seems possible that the craftsman has seen a piece of work, either manuscript or ornament, of this school and has tried to copy it: with the result that he has completely misunderstood one style and muddled it with another. This ring element is fairly well known in England, it occurs, for example, on a carved bone object found at York in 1851, now in the Sheffield Museum (pl. v c).

Another and important element to be seen on the roof plate is the double-contoured Jellinge animal bounded, as on the Jellinge Stone, by asymmetrical irregular interlace (cf. also the Cammin Casket⁴ where are found animals that are almost controlled by the interlace). On the runestone from Balla, Litslena, Uppland, Sweden⁵ we have the interlace properly controlled and the motif understood. The shape of the animals heads have also perhaps a reminiscence of the Jellinge animal, we may have an animal here that is based on that of the Jellinge animal with the curved lip, the bump over the eye, and the acanthus lappet, in fact the whole shape of the head is perhaps most like the acanthus leaf so popular in this art (cf. the animal head, for instance, on the antler object from Køge, Strand, Zealand (fig. 3)). The shape of the head and the ring over the neck is also perhaps to be seen in an element on the warrior's tomb from Gosforth (fig. 4). The traditional dating for the start of the Ringerike style of ornament is about 1000, and for Jellinge not earlier than 960.

¹ T. D. Kendrick, *Anglo-Saxon Art*, London, 1938, pl. LXXVIII, 1.

² R. L. S. Bruce-Mitford, 'A Late Saxon Disk Brooch and Sword Pommel', *B.M. Quarterly*, xv, 1952, pl. XXXIII a.

³ A note on this object is in preparation.

⁴ S. Lindqvist 'Yngre Vikingastilar', *Nordisk Kultur*, xxvii, Kunst, ed. H. Shetelig, 1931, fig. 5.

⁵ *Ibid.*, fig. 20.

The animal ornament on this piece confronts us with a number of interesting and contradictory features. We seem to have here a mixture of styles that are normally separated by over 100 years. The date of the Trehwiddle find is firmly fixed on numismatic evidence to c. 875, as is the similar find at Beeston Tor, Staffordshire.



FIG. 3. Ornament from an antler, Køge, Strand, Denmark (after Brønsted)

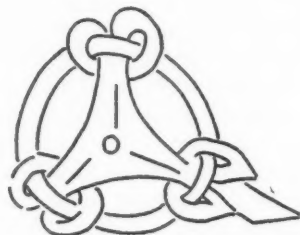


FIG. 4. Detail of ornament from 'The Warriors' Tomb', Gosforth (after Sheletig)

The technique of the metalwork and the detail of some of the ornament on this plate is in the tradition of Trehwiddle and its school (to which are allied such objects as the Witham pins, dated to the end of the eighth century).

The comparison with the Trehwiddle animals is not so close as that with the animal on the Otley cross shaft. On this shaft (fig. 5) we have all the elements of

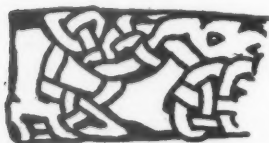


FIG. 5. Detail of ornament from cross shaft, Otley, Yorks. (after Collingwood)

the wallplate of the casket: the body, sub-triangular, losing itself in a tightly woven interlace, the head in the corner and the interlace pattern crossing the neck. Everything is present save the ring and the double contour. Of this object Kendrick says: '[it is] an example of the maximum Jellinge influence on an English monument'.¹ By its very muddled nature it is difficult to parallel this animal (unfortunately no exact date can be given to this shaft). On the grave cover from Levisham, Yorkshire (pl. v b), we have an animal that, although in many ways dissimilar, has a head and a muddled interlace that give the same impression as our animal: the shape of the head, the round staring eyes with bulge above, the double contour and the rather inefficiently delineated limbs all point parallels with the animals on this plate. This animal is in effect a misunderstood version of the Great Beast ornament that appears on the Jellinge stone and various other Scandinavian objects, it is very close, for example, to the animal on the inlaid axehead from Mammen in Jutland.² The ring motif appears many times in the art of the Northern stone-carver, it is perhaps seen at its best in a cross shaft from Kirkby Stephen, Westmorland,³ it occurs on the bone object from York (pl. v c) and in an indefinite and split manner

¹ T. D. Kendrick, *Late Saxon and Viking Art*, 1940, fig. 307b. London, 1949, p. 91.

² J. Brønsted, *Danmarks Oldtid*, iii, København,

³ W. G. Collingwood, *Northumbrian Crosses of the Pre-Norman Age*, London, 1927, fig. 187.



(Photo: Courtesy of the Trustees of the British Museum)

a. Two plates from a Late Saxon casket. ($\frac{3}{4}$)



(Photo: Sir Thomas Kendrick)

b. Grave slab, Levisham, Yorkshire. ($\frac{3}{4}$)



(Photo: Sheffield Museum)

c. Bone object from York. ($\frac{3}{4}$)

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on a runestone from Vang, Norway:¹ on the Jellinge stone it appears as an element of the interlace and it is probably seen here as a new development of an interlace pattern.

Brønsted has remarked at length on the large number of objects of the Ringerike style found in England and has suggested that the style has its origin in England, many others have written of the English roots of the Urnes and Ringerike style. We can see therefore that, although there is a Scandinavian impression created by the tortuous wholeness of the animals, these plates are English.

The art of southern England of the late tenth and early eleventh century is in the florid tradition of the Winchester school, which is far from the barbaric abstraction of the art of these plates. The close similarity between these plates and the crosses of Yorkshire (Levisham, Gosforth, Kirkby Stephen, etc.) would suggest that they were manufactured in the north of England.

THE DATING OF THE PLATES

Assuming that these are English plates, we must now turn our attention to dating. The Trewhiddle mountings and the very similar Beeston Tor brooch² which present so many vital parallels to the pieces we are discussing are dated by coins to about 870/5. Also dated by coins are the Stockholm brooch (c. 1016), and the Sutton, Isle of Ely brooch (coins of William the Conqueror). A less magnificent disc brooch from Igelösa is dated to c. 1006. We also have a series of other coin-dated finds which are related to these brooches: the tag-end in the Cuerdale hoard (c. 906), the strap-end and the spoon in the Sevington hoard (c. 880). Another strap-end of Cuerdale type appears in the Talnotrie hoard (c. 910). Dated by less satisfactory means is the crozier found in the tomb of Ralph Flambard, Bishop of Durham³ (died 1128), the decoration of this object is closely related to that on the bone object from York (pl. v c). The chronology of the stone crosses of this later period is very much disputed and cannot be used in this context.

These associations and the evidence of the manuscripts provide our main means of dating the art styles of Britain in this period. The work of Kendrick, Shetelig, and Brønsted has set a preliminary chronology for the styles of England but the student of this period is too often faced with pieces which are difficult to fix into a chronological framework. These plates are a case in point. From the firm dating evidence of Trewhiddle, etc., it can be seen that the art style on these plates has some roots in the ninth century. Our knowledge of the Scandinavian material, however, enables us to date the introduction of the Jellinge style into England about the middle of the tenth century. We have seen that one of the closest parallels to the animal on the roof plate (that on the Otley cross) has been described by Kendrick as 'the maximum influence of Jellinge ornament in England'. This then would seem to suggest that a late tenth or early eleventh century date for these plates would

¹ H. Shetelig, *Osebergfundet*, Oslo, 1920, iii, 1938, pl. LXXVIII, 2. fig. 332.

² T. D. Kendrick, *Anglo-Saxon Art*, London, *Journ.* xviii (1938).

³ T. D. Kendrick, 'Flambard's Crozier', *Antiq.*

not be unreasonable, especially when we consider the date of the Igelösa hoard and postulate a similar date (on comparison with other examples) for the Penrith brooch. We are, however, still left with an element of the Ringerike style in the ring round the neck. It seems unlikely that this style appeared in England until the turn of the tenth century. Unfortunately it is impossible to date the penannular brooches, Raftery has dated them to the beginning of the tenth century,¹ but the evidence seems insufficient. We can from this statement of the evidence reasonably accept a late tenth or early eleventh century date for these two plates.

THE USE OF THE PLATES

As I have said the plates must be the wall and roof plaques of a house-shaped casket (fig. 6). As such they fall into a well-known British group, which have

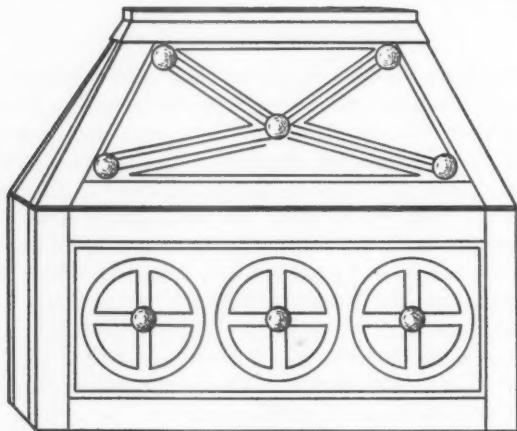


FIG. 6. Reconstruction of the casket with the plates in position. ($\frac{1}{2}$)

somewhat unwisely been labelled by Swarzenski 'Anglo-Irish'. The group referred to by Swarzenski are all within that school that is commonly known as Irish and the 'Anglo' part of the title is liable to mislead the student in that there is little doubt that these shrines were manufactured in Ireland. The two plates while differing in ornament from the Irish examples are similar in design to the only definite English casket known: the Gandersheim casket in Ducal Museum, Brunswick, which was known to have been in the Abbey of Ely in Late Saxon times. But the ornament of this casket is so different and it is so much earlier in date that we cannot consider it in this connexion: we seem to have here the sole instance of a metal-covered house-shaped casket of English manufacture.

Originally the plates would have been confined and perhaps fixed to the wooden

¹ J. Raftery, *Christian Art in Ancient Ireland*, ii, Dublin 1941, pp. 147 f.

base by means of cast metal angle strips, perhaps in the shape of ridge-poles of the type described by Armstrong¹ (fig. 6).

The use of the casket is difficult to determine: traditionally such objects are called reliquaries or shrines and I have used this word myself somewhat incautiously in this context. There is a fairly large group of these objects scattered in various continental museums and cathedral treasuries.² Their association in their cultural context with the later Irish shrines and reliquaries for which we have good literary evidence perhaps justifies us in using the term 'shrine' in this case, but it would be more cautious and perhaps more correct to use the term 'casket' for this object.³

¹ E. C. R. Armstrong, 'Lord Emly's Shrine, two ridge poles of shrines and two Bronze Caskets.' *Antiq. Journ.* ii, fig. 2.

² For discussion of these see M. Conway *P.S.A. Lond.*, 1918, pp. 218 f.

³ The argument in favour of the Irish caskets

being reliquaries is noted in Raftery (1941), p. 48. But caution is I think necessary in our terminology concerning the object to which these two plates were attached on account of our lack of knowledge of the English material.

A ROMAN TILERY AND TWO POTTERY KILNS AT DUROVERNUM (CANTERBURY)

By FRANK JENKINS, F.S.A.

IN December 1952, while employed in levelling the ground prior to the construction of the approach to the new Cattle Market site at St. Stephen's Road, Canterbury, the driver of the mechanical excavator, Mr. Claude Jarvis, noticed a few pieces of Roman pottery and immediately informed the writer of the discovery. From then on a close watch was kept on the site for any structural remains. After a few days an extensive area of burnt brick-earth was encountered, followed soon afterwards by the tops of two walls lying parallel to each other. It was then arranged for the site to be excavated under the auspices of the Canterbury Excavation Committee, the present writer undertaking the direction of the work. The results of this investigation form the subject of this report.

For convenience in recording, the site is divided into two main areas, viz. Area I and Area II.

The site lies due north of the Roman city of Durovernum, on gently rising ground, at about 34 ft. above sea-level (Newlyn Datum), on the north side of the river Stour. Geologically the site is on the brick-earth which covers the whole area to a considerable depth. As its name implies it is admirably suitable for brick-making, in fact, only a few years ago a modern brickworks, not many hundred yards distant from the site to be described, went into disuse after a long period of activity (O.S. 6-inch Kent Sheet, XLVI, N.E. (Hackington Parish); O.S. 2½-inch Map Reference Nat. Grid, 61/150588).

PREVIOUS EVIDENCE

Although the area must have been dug over at various times in the past fifty years it is remarkable that nothing relating to finds of the Roman period has been recorded. The chance finds now to be described have only been brought to the notice of the present writer since the excavations started. About the year 1940 it seems that Mr. F. G. Blanche of 15 Stour View, Broad Oak Road, unearthed a large quantity of broken tiles, at the time identified as Roman, while digging a pit for an air-raid shelter. Mr. W. Husbands of Beverley House, whose garden also adjoins the site, has informed the writer that similar fragments of tiles are commonly encountered at a depth of two spits below the surface, and since has produced fragments to substantiate his statement. Mr. W. Stemp, who for many years was employed as a brick-burner at the now disused brickworks, once operated by Messrs. Edwards and Sons Ltd., states that to his knowledge, at various times in the past thirty years the workmen while digging for brick-earth had found 'fire-pits', which according to his description, in some cases had a step or 'earthen seat' around them, and had ashes in the bottoms. The site of these 'pits' is now covered by the Power Station of the Electricity Authority in Broad Oak Road. From these

scraps of information it would seem that if trained observers had been there to record the discoveries, our knowledge of the industrial activities of the Romans in this area would be more complete.

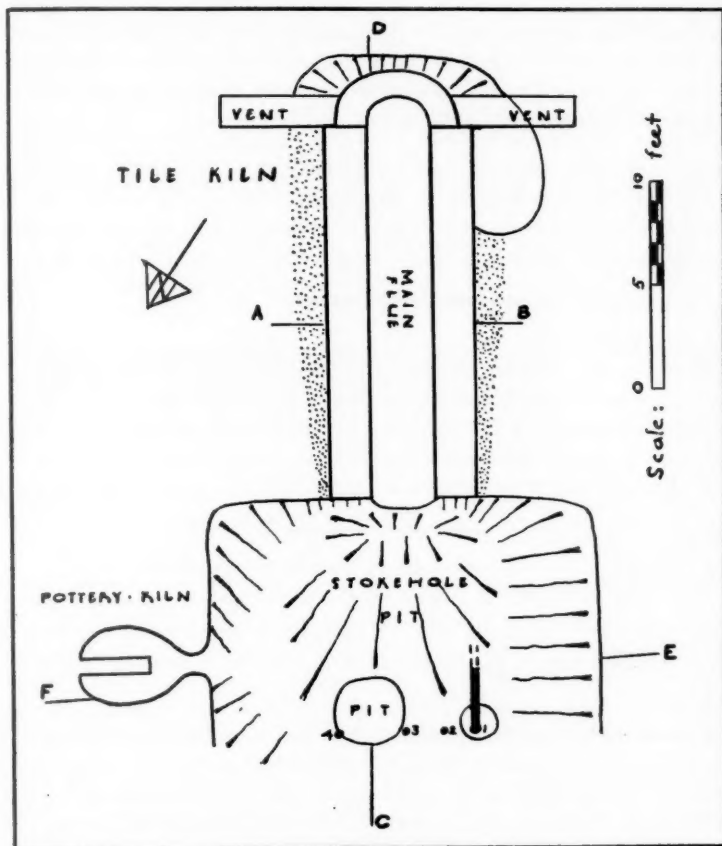


FIG. 1. Plan of Roman tile kiln and pottery kiln, Area 1, St. Stephen's Road, Canterbury

THE TILE KILN (AREA 1) (figs. 1 and 2)

The tile kiln was the normal T-shape in plan. It consisted of a large stoke-hole pit, from which a tile-built flue channel led into an open vertical cross-vent, which acted as a chimney. The kiln did not have a permanent floor to the oven where tiles were stacked for firing. For this reason and others which will be discussed below, the construction of this kiln does not fit exactly into Mr. W. F. Grimes's classification,¹ as it is a hitherto unrecorded type.

¹ *Y Cymmroder*, xli, 59-60.

The main flue

The main flue was 3 ft. wide and 19 ft. 6 in. long, and consisted of two much mutilated parallel walls, each 2 ft. thick, built of flat Roman building tiles set in puddled clay, in a trench about 3 ft. deep and 7 ft. wide at original ground-level. The base of this flue sloped slightly downwards from the furnace mouth to the vents. It had been roughly rendered with puddled clay so that it was slightly concave in section, no doubt to avoid awkward corners so as to ensure that the ashes could be easily withdrawn after each firing.

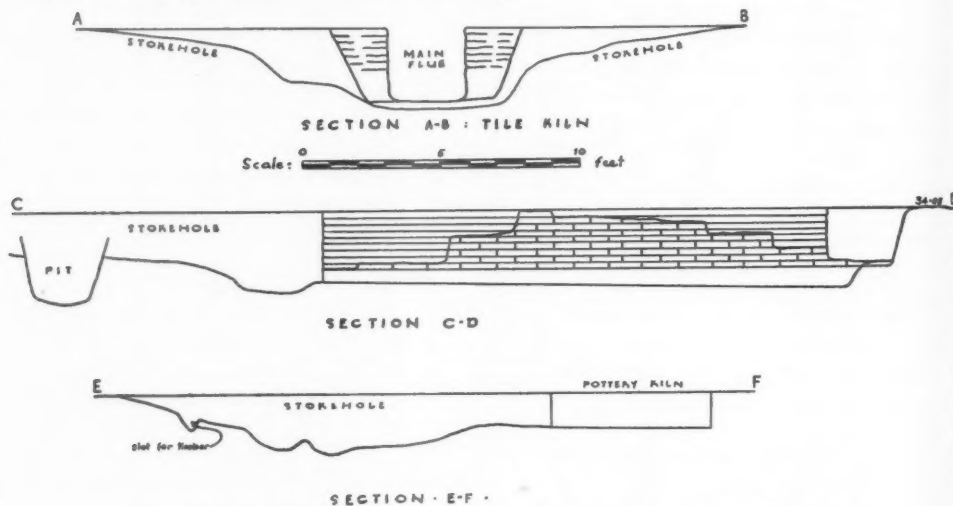


FIG. 2. Section of tile kiln and pottery kiln, Area 1, St. Stephen's Road, Canterbury

The cross-vents

The cross-vents were situated at the end of the main flue opposite the stoke-hole and at right angles to its main axis. Each measured 9 in. wide by 5 ft. long, and sloped upwards to the surface from a point just above the bottom of the flue. They probably served as chimneys and to control the draught through the kiln, but not apparently to conduct the heat into an oven.

Upon excavation they were found to be tightly packed with crumbled burnt clay, much of which was evidently derived from the vent walls which had collapsed while the kiln lay derelict. From the upper part of this homogeneous filling came a few potsherds similar to those in the stoke-hole pit, to be next described. The tops of both vents were found to be slightly mutilated by pits of uncertain date dug from a higher level, but these fortunately were not deep, so that the complete shape of the vents was determined.

The stoke-hole pit

The stoke-hole pit, which was neither walled nor floored, was cut into the natural brick-earth, the deepest part being in front of the furnace mouth. It was difficult

to excavate, for the filling, which seemed to have been deliberate, consisted of various tips of debris, viz. a thick layer of burnt daub overlying stiff puddled brick-earth containing many fragments of Roman tiles. This covered a similarly puddled deposit mixed with black ash resting on the natural brick-earth at the bottom of the pit. From this layer came a large quantity of tile wasters, and a smaller quantity of pottery.

The hut

Four post-holes, placed at right-angles to a narrow channel, were found in the natural brick-earth at the rear of the stoke-hole where the bottom of the pit was comparatively level. They were evidently all that remained of a rough lean-to timber hut used by the kiln attendants, the narrow slot being where a wattled wall had once rested. One post-hole had been cut by a pit sunk from a higher level after the site had been levelled off, apparently in late Roman times.

The tile-works field

An examination of a wide area around the kiln showed that debris derived from the industry was scattered over the original ground-level for some distance to the north and east of the site. Two waste pits were found and partially excavated. They contained little but numerous tile wasters. The very few pieces of pottery were with one exception featureless, but evidently contemporary with the tile-kiln stoke-hole pit filling.

THE TILE KILN IN ACTION

After a close examination of the burnt area around the kiln had yielded no trace either of masonry walls or footings trenches, it was evident that no permanent superstructure had existed above original ground-level. The horizontal flue channel did not show signs of having at any time supported an arch, or the side walls a floor. Furthermore, as there was no elaborate system of cross-walls and vertical flues to conduct the heat upwards into an oven, as with the normal type of rectangular tile kiln,¹ it is evident that some other system of firing was employed. Accordingly, after discussing the matter with local brick-burners long experienced in the work, the following method is suggested.

The layers of 'green' tiles were stacked with fuel in the horizontal flue channel, the lowest standing on the bottom. Each tile would stand edgewise, those in the first layer at right angles to the long axis of the flue, and those in the next, in the other direction, and so on with alternate layers until the requisite number was stacked up. From the impressions found on some of the larger pieces of clay found in the stoke-hole pit, it seems that pads of puddled clay were used to support the tiles and act as spacers.

The flue was thus filled with tiles and fuel for most of its length with the exception of a space, perhaps 3 ft. long, at the stoke-hole end. The stack of tiles in its final form could have been built up to a height equal to six layers, that is, about

¹ *Y Cymmroder*, xli, 59-60.

3 ft. above the top of the side walls of the flue. Fuel was now placed on the stack, by this time covered by soil and turves, and then ignited. By controlling the draught the fuel would be reduced to charcoal. When this had been accomplished a fire was started at the stoke-hole end in the space previously reserved for it. The heat within the stack would draw this fire through the charcoal which would burn to a white ash, the draught being controlled at the vertical vents. When it burned clear through these apertures the required temperature was reached and the kiln could be completely sealed off. It was then left to cool, a process which would probably take seven days to complete. Finally, the covering of baked soil and turves was removed and the tiles withdrawn.

THE PRODUCTS OF THE TILE KILN

Tile burning in the manner just described was hardly an efficient method. The proportion of wasters must have been considerable. With such a kiln the temperature would not be constant throughout its entire length. Those tiles towards the centre would be subjected to a more uniform heat, thus minimizing the risk of fusion and distortion, those at the base would be over-fired, and those on the outside would be inclined to be under-burned. Hence in the wasters found strewn all over the area, all types of faulty firing were represented. As a result of the temperatures rising too rapidly some tiles had vitrified prematurely so that oxidation could not be completed owing to closing of the surface pores. Such tiles have a black core. Others had a bloated surface, and many were warped and twisted. Those that had been subjected to intense heat were completely vitrified, their surfaces having run like molten glass.

In the great quantity of broken tiles found during the excavations the following types were represented.

A. *Roofing tiles*

1. *Imbrices.*

Many fragments of this type of curved tile were found, but none were large enough for their full size to be determined.

2. *Tegulae.*

The normal flanged roofing tiles were also numerous. Some had semicircular grooves placed on the lower edge. Two types were found, one having a rectangular cut-away with vertical sides at the ends of the flanges, while the other type had similar slots in the same positions which were chamfered, thus showing two methods of fitting one tile to the other.

3. *Ridge tiles (fig. 3).*

The true ridge tiles were perhaps the most interesting, in that they appear to be unique. They were more triangular in cross-section than the imbrices. All the examples examined had slots cut into their lower edges, two a side, to fit snugly over the two flanges of adjacent tegulae which were used in conjunction with them. All bore a scored lattice pattern on the upper surface. This seems to be functional rather than decorative, perhaps serving to key the mortar spread over them, for it is clear that some form of weatherproofing between adjacent tiles would have been necessary.

B. Building tiles

The usual large flat building tile used by the Romans for facing courses in walls was common. A few were complete, the average size being $15 \times 11 \times 1\frac{3}{4}$ in. Some showed a rough, single boss of clay on the upper face, near one corner, so placed that it could have been used as a spacer between adjacent tiles while in the kiln. Grooving arranged in a semicircular pattern at the same end as the boss may have served as a key for mortar or as an indication to the builder as to which way the tile should be placed.¹

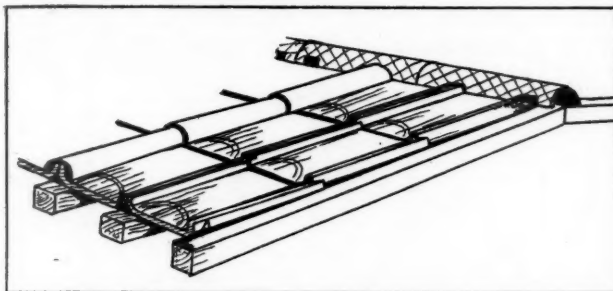


FIG. 3. Sketch to illustrate method of using ridge tiles in conjunction with *tegulae* and *imbrices* in Roman roof construction

C. Flue tiles

The common form of box tile was not plentiful. Perhaps many featureless fragments of thinner dimensions than the types just described could be regarded as of this form, but this is not certain. Only a few pieces could be recognized by their characteristic combed decoration. Of those recovered a few were decorated with a seven-toothed comb, and others by one having five teeth, scored in the clay while still in a plastic state. The actual sizes could not be determined. They were evidently of the usual type, the decoration serving to key the plaster which would have eventually covered them.

D. Pilae tiles

Tiles used in the construction of *pilae*, the square piers built to support floors of hypocausts, were represented by a number of complete examples. The average size was found to be $8 \times 8 \times 1\frac{3}{4}$ in. A few of these had been impressed by the footprints of stray dogs while the clay was still in a plastic state.

THE POTTERY KILN (AREA I) (figs. 1 and 4)

A pottery kiln was found on the north-east side of the tile-kiln stoke-hole pit, and only 9 ft. from the centre of the mouth of the tile-kiln furnace. It was of the normal oval-shaped up-draught type (Grimes's Type A. 1),² having a tongue-like column extending from the back wall to the centre of the furnace, in line with the fire-hole entrance. This column served as the support for the oven floor on which the pots were stacked for firing, of which no trace had survived.

¹ *Verulamium* (The Society of Antiquaries of London, Research Report, No. XI), p. 141, in which the purpose of these bosses on tiles is dis-

cussed. Also *J.R.S.* xxii, 133.

² *I Cymmeroder*, xli, p. 55, fig. 31, 1.

THE POTTERY KILN SUB-STRUCTURE (fig. 4)

The combustion chamber calls for special comment. It is certain that the floor support was not added after the chamber had been constructed, for no break was detected where it joined the furnace wall. In fact, it was clear that the whole structure had been fashioned in one operation by carefully digging a pit to the required shape including the central wall in the natural brick-earth. By adopting this method a lining of puddled clay was not needed, a preliminary firing being all that was necessary to bake the interior to the required hardness. An interesting

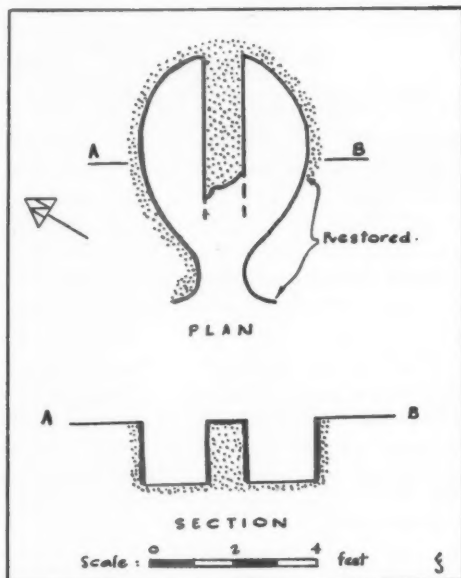


FIG. 4. Plan and section of Roman pottery kiln, Area I

feature was the existence of the shallow imprints of a spade on the walls of the furnace and the floor-support. These were semicircular in shape, and $7\frac{1}{2}$ in. wide, and must have been made by a Roman iron-shod spade.¹ As the floor of the oven was not found it is assumed that it had been destroyed when the kiln was put out of action and used as a rubbish pit.

THE PRODUCTS OF THE POTTERY KILN (AREA I)

The groups of pottery actually found in the pottery kiln furnace and in the main stoke-hole pit included many wasters. No complete pots were found, and in consequence, rim sections only are included in our analysis. The fabric was the same throughout the series, all vessels being made of the local brick-earth. The colour varies with individual vessels, and ranges from bright orange, through brown to dark grey, dependent upon the amount of firing received.

¹ *Antiq. Journ.* xxviii, p. 177, fig. 3.

For convenience this pottery is described in two groups, viz. (a) furnace filling, and (b) main stoke-hole pit, lowest deposit.

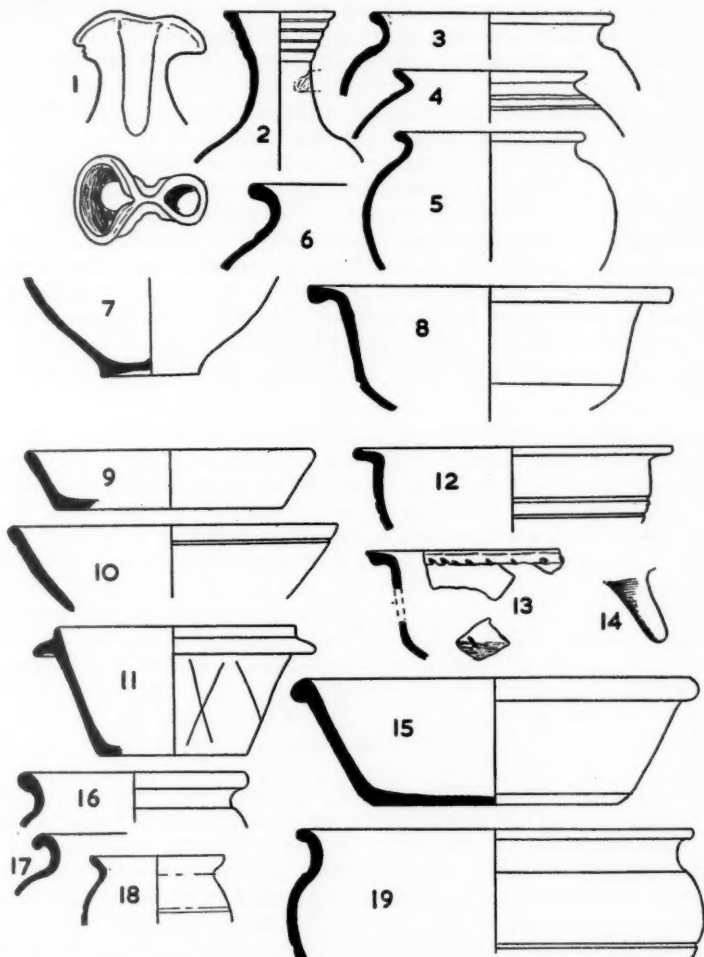


FIG. 5. Pottery from kiln, Area I. Nos. 1-8 from the furnace, Nos. 9-19 from the stoke-hole pit. ($\frac{1}{4}$)

Detailed description of the pottery (Fig. 5)

(a) From the filling of the pottery kiln furnace.

1. Jug with pinched mouth. The type appears to be not later than the reign of Hadrian in date, but an example occurred in a kiln at South Carlton, Lincs., which was active from A.D. 140-80.¹ At Richborough, on the other hand, one of this type is dated c. A.D. 50-80,²

¹ *Antiq. Journ.* xxiv, p. 137, fig. 8, type 2K.

² *Richborough III* (Soc. Ant. Res. Rep. No. X), vps 206-7.

while at Canterbury others occurred at the Dane John kiln which seems to have ceased production in the third or fourth decade of the second century.¹ At Verulamium a few were found with many wasters in a rubbish pit containing material evidently derived from a nearby pottery factory, dated to the Hadrian-Antonine period.²

2. Single-handled, ring-necked jug. This type of jug had a long life which extended well into the second century.
- 3-5 inclusive. Cooking-pots. No complete profiles have been recovered. The rim sections selected for illustration show the principal variants.
6. Jar with wide mouth. The few rim fragments found in the furnace chamber are similar to that illustrated. The only base which belongs to this class was much thicker than those of the cooking-pot series (cf. No. 7 below). The underside was quite flat.
7. Three bases of cooking pots were found, evidently of the same series as types 3-5 above. They vary slightly in size, but all have the rising underside as that illustrated.
8. Horizontally flanged, carinated bowl. The type is not exactly paralleled at the Dane John kiln, although reeded rims were found. The type is exactly matched by examples made at the Reed Avenue pottery kiln, also at Canterbury. The present pot is also paralleled on sites farther afield where the type was current in the first half of the second century.
- (b) From main stoke-hole pit, lowest deposit of stiff clay and black ash.
 9. Small bowl with thickened lip.
 10. Straight-sided bowl with plain lip, demarcated by a horizontal groove on the outside. Bevelled foot. Occurs in the second-century levels in Canterbury.
 11. Bowl, oblique-sided, with bead and flange rim, and bearing tooled line decoration on outside. This type had a long life, appearing first in the second century and lasting into the fourth, as at Gelligaer³ and Richborough,⁴ respectively. At Colchester it occurred in graves of the period A.D. 100-50,⁵ while at Canterbury those examples which have been previously recorded came from fourth-century levels.⁶ In view of the associated pottery evidence, and its position in the lowest deposit in the stoke-hole pit, the present example seems to belong to the earlier period, probably towards the end of the second century.
 12. Flanged bowl (see also No. 14 below). The form is similar to No. 8 above, but the profile is more rounded and the carination is marked by two girth grooves. A similar bowl was found in a late second-century level in Canterbury.⁷
 13. Flanged bowl. The type is represented by only three small fragments, hence the reconstruction is conjectural. The main feature is the crudely incised decoration on the outside edge of the flange and at the carination. It belongs, perhaps, to the 'tazza' class of vessel of which the type with the notched decoration is said to be later than the frilled variety. The latter was replaced by the former decoration in the third century.
 14. Tripod bowl. One short, stumpy leg or foot seems to be the sole representative of this class of bowl, although it is quite possible that No. 12 above is part of the same or a similar bowl. Tripod bowls occurred at Camulodunum (A.D. 49-61), and according to the excavators, were never popular Roman types.⁸ It seems to have died out by the end of the

¹ *Arch. Cant.* liii, p. 129, type 55, and p. 131, type 56.

² *Antiq. Journ.* xxi, p. 290, fig. 5, type 12.

³ *Gelligaer*, pl. xii, 11, hence *Y Cymmroder*, xli, p. 160, No. 143.

⁴ *Richborough I* (Soc. Ant. Res. Rep. No. VI), type 121.

⁵ May, *Catalogue of Roman Pottery in the Colchester and Essex Museum*, pp. 155-6, type 256.

⁶ *Arch. Cant.* lx, p. 84, fig. 8, 4.

⁷ *Ibid.*, p. 98, fig. 15, 14.

⁸ *Camulodunum* (Soc. Ant. Res. Rep. No. XIV), pp. 224-5, types 45a and 45b, also p. 228, types 63a and 63b.

Flavian period. At Wroxeter¹ a mica-gilt example is dated A.D. 80–120, while others occurred at Richborough² and Silchester,³ but were not firmly dated. The nearest parallels to the present example were found at Caister in a kiln active during the period A.D. 120–30, and from the other evidence obtained from the same place it seems clear that the type continued well into the first half of the second century.⁴

15. Straight-sided bowl with roll-rim. At Richborough the type is dated A.D. 80–120,⁵ but at Verulamium it does not seem to have come into fashion until the end of the period A.D. 120–60.⁶ At Canterbury, on the other hand, the type occurred in a Flavian context.⁷
- 16–17. Cooking-pots, typical rim-sections.
18. Small jar or beaker, having an everted lip, and a smooth dark coating. A few pieces of the body of the same, or a similar pot were found with it, but due to their friable and eroded state it is not possible to reconstruct the original shape with any certainty.
19. Large bowl with wide, outward turned mouth.

Samian pottery, not made at the kiln

1. T. S. Drag. Form 18/31, stamped F. AL BIN I OF. F. Albinus of South Gaul, period Flavian? (cf. Oswald, *Index of Potters' Stamps*, p. 11).
2. T. S. Drag. Form 45. Minute fragment showing part of incised line decoration sometimes present around lion's head spouts (cf. Oswald and Pryce, pl. LXXIV, No. 1, Lezoux ware, period A.D. 160–80).
3. T. S. Walter's Form 79. Belongs typically to the second half of the second century (cf. Oswald and Pryce, pl. LVIII, No. 1, p. 199).
4. T. S. Drag. Form 35. Rim fragment and part of base.
5. T. S. Drag. Form 37. Rim fragment only, and too small for accurate dating. Evidently second century.

Decoration on the coarse ware

Other than the few examples to be described, any evidence of a regular use of distinctive decoration by the potter is singularly absent. A few small pieces in the same technique as No. 18 above show traces of finely rouletted lines between girth grooves. One piece of similar ware is decorated with raised dots made by stabbing the interior of the pot while still in the plastic state. Tooled lines of the usual type are present on the flanged bowl No. 11; while one indeterminate fragment of sandy grey ware bears a wavy line decoration as seen on the upper zone of decoration on an urn from the St. Dunstan's Roman cemetery.⁸ The present piece may belong to a similar vessel, and in that event could be ascribed to the mid-second century.

Conclusions. The dating of the kilns. Site I

The fact that the two kilns were situated only 9 ft. apart, with the long axes at right angles to each other, and with firing-holes facing inwards into the main stoke-hole pit, strongly suggested that they were active at the same time. This surmise was confirmed by the stratigraphical evidence. The deposit of puddled clay mixed with ash overlying the bottom of the stoke-hole pit formed a continuous layer throughout the stoke-hole pit and the kilns.

¹ Wroxeter II (Soc. Ant. Res. Rep. No. II), p. 50, fig. 18, 55.

² Richborough II (Soc. Ant. Res. Rep. No. VII), p. 101, type 155.

³ Arch. lxi, fig. 6, hence May, *The Roman Pottery from Silchester*, p. 118, pl. XLIX, No. 68.

⁴ J.R.S. xxii, p. 39 and pp. 43–44, pl. XI, M.

⁵ Richborough I (Soc. Ant. Res. Rep. No. VI), p. 97, type 46.

⁶ *Antiq. Journ.* xxi, p. 277, fig. 1, type 3.

⁷ Arch. Cant. lxiii, p. 102, fig. 11, 29.

⁸ Arch. Cant. xxxix, pp. 52–53, No. 720, Grave Group L.

It was also evident that the kilns lay derelict for some time before the site was eventually levelled off. This was proved by the presence of a layer of silty brown loam overlying the accumulation of white ash in the bottom of the tile kiln for its entire length. Additional evidence was provided by the ruinous state of the side walls and the crumbled linings of the cross-vents, showing them to have been considerably weathered before being filled in.

The same conditions applied to the pottery kiln, for this had been used as a rubbish pit, being packed with many fragments of ridge tiles and wasters. This no doubt took place when the site was finally levelled off, for the whole area was covered by a thick layer of burnt daub. The tip-lines as seen in section when excavated showed that mainly the filling had been thrown in from the north-west side of the pit, for they sloped downwards right into the tile-kiln furnace from that direction, and effectively sealed the layer of silt which had accumulated while the kiln lay derelict.

The evidence derived from the pottery clearly shows that the site was not levelled off until towards the end of the second century or perhaps in the early third. This dating rests on the Samian ware, two pieces of which came from the lowest level in the stoke-hole pit and belong to the latter half of the second century. It would therefore appear that the kilns were active about the period A.D. 130-40. They lay derelict for some years and the site was finally deliberately filled in and levelled off about A.D. 200.

THE POTTERY KILN II (AREA II) (figs. 6 and 7)

The pottery kiln found on Site II, about 70 yds. east-north-east of the tile kiln, consisted of a stoke-hole pit whence a short firing tunnel led into a combustion chamber above which the oven was set. This chamber was roughly circular in plan and measured 3 ft. 6 in. internally. In this chamber was a trefoil arrangement of vertical flues formed by three pilasters which lined the internal wall. These flues had been fairly carefully fashioned out of puddled clay reinforced with tiles. In fact, in the side of one of the flues an imbrex had been set in a vertical position.

An examination of the tops of these pilasters established how the oven floor had been supported, for overlying a piece of flat tile were pieces of normal tiles rendered over with clay for stability. Though no other part of the oven floor had survived *in situ*, it is fairly clear that it consisted of flat tile similar to that on the pilasters, for several pieces were standing in a vertical position on the bottom of the combustion chamber, and were of the same thickness (viz. $1-1\frac{1}{4}$ in.). A line of unbaked clay found adhering to the front wall of the kiln, on a level with the edges of the floor still surviving on the pilasters, showed that the edge of the floor had been sealed with clay above the fire-hole entrance.

As an additional support, a wall had been placed in the centre of the combustion chamber, in line with the fire-hole entrance. This wall was 2 ft. long and about 7 in. wide, and built of eight courses of broken tiles set in clay which had baked hard in the subsequent firings. The top two courses were found to be in a ruinous state, but enough had survived to show that the top of this wall was at the same level as

the remains of the oven floor on the pilasters. From this it was apparent that the walls of the oven still survived to a height of some 20 in.

At the back of the oven the burnt linings of the three vertical flues curved upwards and outwards away from it, converging into a short, clay-lined channel which acted as the vent or chimney. This was found to have been mutilated by a small pit or post-hole dug from a higher level after the kiln was abandoned. Only one side of this aperture was found intact.

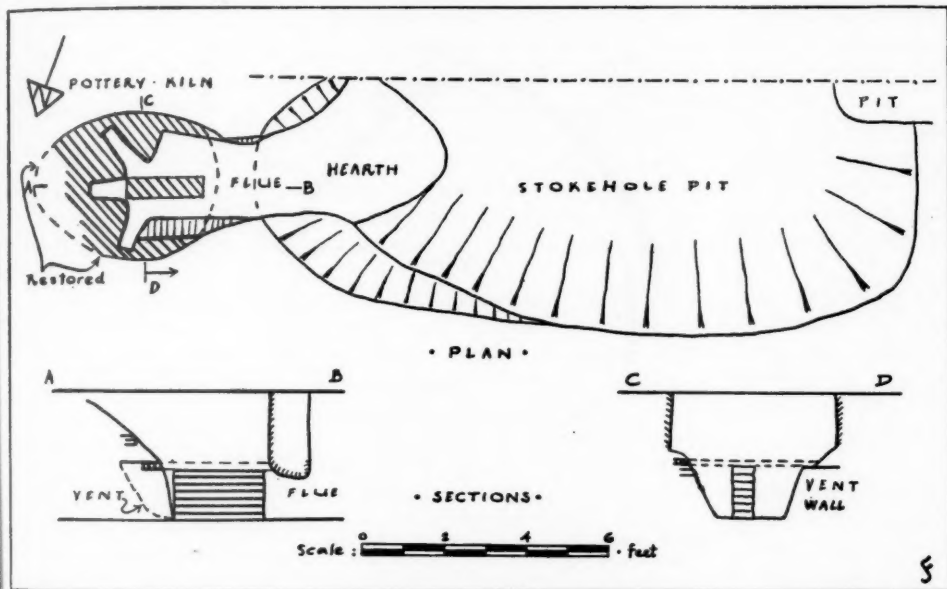


FIG. 6. Plan and sections of Roman pottery kiln, Area II.

Having established that the oven wall survived above the level of the oven floor, and was the part which had originally been set below the contemporary ground-level, it was important that the details of the structure which had once enclosed the oven area should be investigated. As this was usually of a temporary nature it was hardly surprising that no trace remained *in situ*. All fragments of burnt clay in the area were closely examined in the hope of elucidating this. The following reconstruction is based on this evidence.

From the impressions on the back of some of the pieces which were inspected, it seems that a framework of sticks was built over the kiln in a dome-shaped formation. These sticks were arranged in groups of two or more at intervals around the top of the lower part of the oven, and were probably tied together at the apex. Each group of sticks was then enclosed in an independent coating of puddled clay, and then, as the horizontal impressions clearly showed, were tied to the other sticks by some kind of binding material. This was held in position by means of a piece

of clay pinched up over it. The vertical face of the best specimen of this clay recovered from the stoke-hole filling was distinctly concave in profile on that side, bearing evidence of having been subject to heat and smoke. Hence, in its final form, the interior of this structure would have been ribbed vertically in order to give sufficient strength to support the weight of the layers of clay and turves which would eventually cover it.

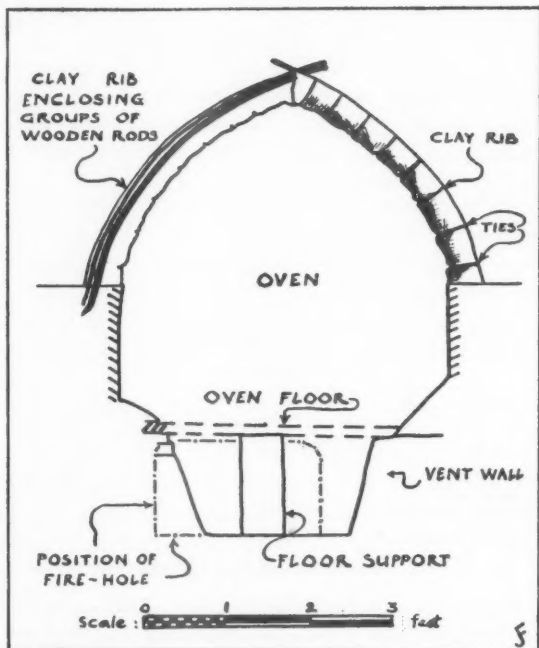


FIG. 7. Reconstruction of pottery kiln (Area II), showing method employed in making oven roof

THE KILN IN ACTION

In view of the evidence obtained during these excavations, some observations on the method of firing the kiln seem appropriate. Because of the presence of the central floor support and also the pilasters in the combustion chamber below the oven floor, it seems clear that the available space was not sufficient for a large amount of fuel to be accommodated. It is therefore suggested that a small starting fire was placed in the chamber in order to create the necessary draught, and when that had been attained, the main fire was placed at the mouth of the firing tunnel. In other words, part of the stoke-hole pit was the furnace. In fact, the extensive signs of burning immediately in front of the furnace mouth strongly suggested that this had been the case.

With the firing arrangements just described, the heat produced by the starting

fire would draw the main fire through the firing tunnel into the combustion chamber, and thence into the main oven up through the vertical flues. The heat thus generated may possibly have been deflected into the oven by means of the rear wall of the superstructure, which could have been so designed to achieve this. In other words, it acted as a kind of fire-back, thus ensuring that the maximum amount of heat was usefully employed before escaping through the chimney.

Another method closely similar to that just described, but differing in only one respect, might have been employed. The pots were covered with fuel which was first of all reduced to charcoal, then, when that condition was reached, the heat was increased until the charcoal had been reduced to a white ash. At this stage the fire would burn clear through the chimney, thus indicating to the potter that the time had come for him to seal off the kiln and gradually reduce the heat.

Of the two methods, the second seems the more practical. The heat from the main fire must have been reduced somewhat after passing up through the oven floor, and with the first method the pots stacked at a high level in the oven would have been under-fired. If, on the other hand, this heat was supplemented by the reduction of charcoal to white ash, this would tend to conserve the heat over a longer period.

Another interesting feature is that the stoke-hole pit seems excessively large for the size of the kiln, but this appears necessary for the following reasons. In the lowest filling of the pit was a large quantity of broken tiles and wasters, while in the nearby garden a few feet away, a similar mass of material had been discovered some years ago, when an air-raid shelter was constructed. The stoke-hole pit runs out under the right-of-way which separates this area from the present site, and it seems fairly clear that another kiln of some kind lies in that direction.

In any case a large stoke-hole was necessary, for adequate working space would be needed for the kiln-workers as well as for the accommodation of the fuel which must have been considerable. As has been pointed out to the writer by a local brick-burner, once the firing process was started and well under way, there would have been no respite for the workmen. Hence, the stack of fuel would have to be ready to hand so that the minimum of effort was expended in maintaining the fire.

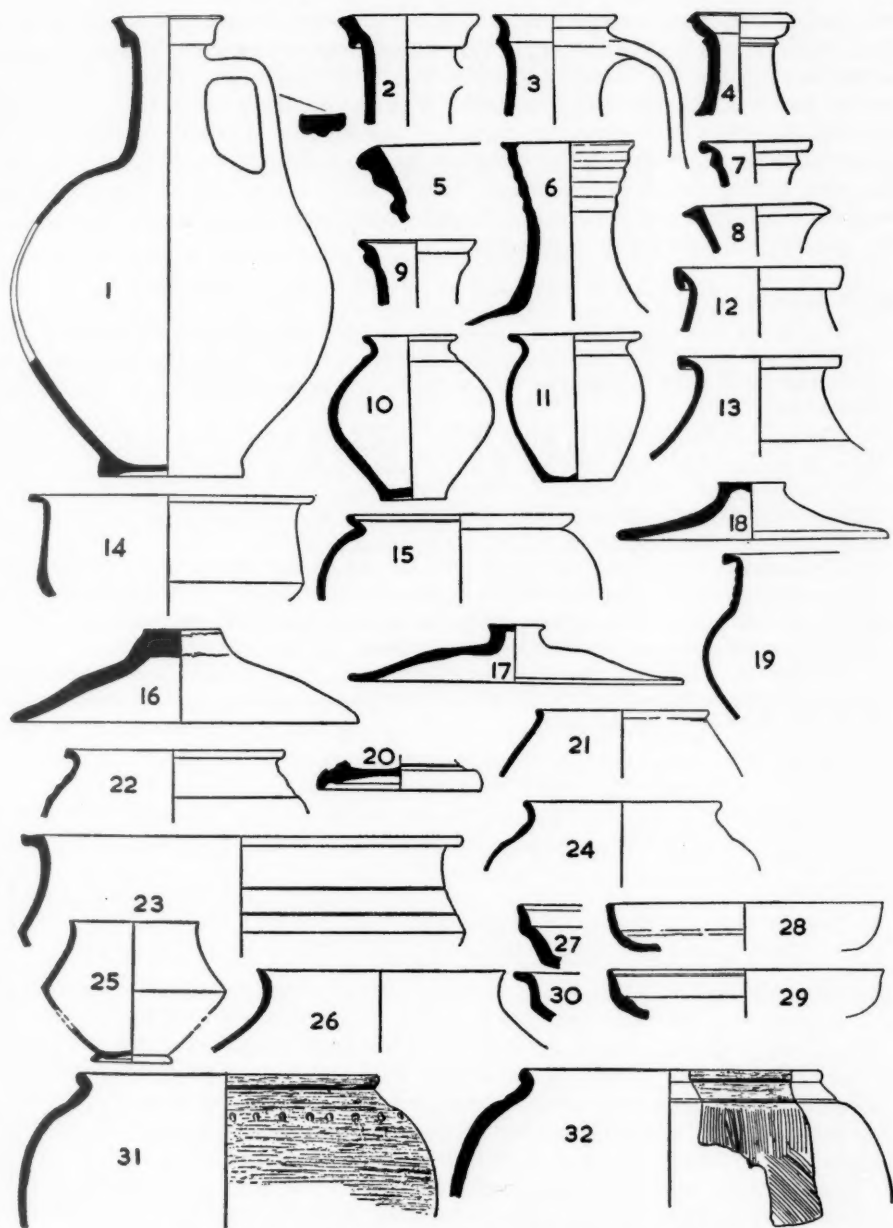
This kiln produced evidence of two periods of construction. First the support of the oven floor depended solely on the pilasters. Later, perhaps because of the difficulty experienced in spanning the furnace area with a clay floor unsupported in the centre, causing collapses during the actual firing, the wall was inserted to take the weight. This was shown by the blocking of the rear vent by this wall, which made it useless for performing its original function of conducting heat into the oven. Traces of soft clay adhering to the oven wall at floor-level, above the firing tunnel, seemed to represent the first period, for as the central wall extended as far as that point any additional fixing of the oven floor would have been quite unnecessary. An examination of the floor of the combustion chamber, after this wall had been removed, showed a uniform hardness, and no sign of an unburnt area where it had stood, as one would expect if that part of the floor had been protected in this manner.

The pottery from the site of kiln II (fig. 8)

1. Flagon with nearly cylindrical neck and out-curved triangular lip which is undercut. This is a copy of Hofheim type 50, and of the same series as Camulodunum 140.
 2. Flagon neck of a similar flagon. These seem to have been the most popular type made at this kiln, for many fragments of 'wasters' were found in the stoke-hole pit. Here hardly later than the reign of Nero.
 - 3-9 inclusive.
Flagon tops of various types and with the exception of two of No. 7 are represented by single examples.
 10. Flask with narrow mouth and mildly flattened shoulder and a slight cordon.
 11. Jar, small size, with wide mouth and outward-turned lip. This and No. 10 were found on the bottom of the stoke-hole pit in a patch of ash and daub.
 12. Beaker of smoothed brown soapy ware with under-cut rim. The fabric is typically native Belgic.
 13. Beaker with everted under-cut lip.
 14. Bowl of carinated form with plain outward-turned lip. Almost level lip. This latter feature may be only accidental, due perhaps to inequality of firing, for some 'wasters' show a distinct rise above the level position. In view of this a fairly even example has been selected for illustration.
 15. Bowl with everted lip, recessed on the inner edge.
 16. Lid with thick wall and clumsily made finger-grip. The example illustrated is restored from a complete, badly warped 'waster'.
 17. Lid with crudely moulded finger-grip.
 18. Lid with wide finger-grip.
 19. Jar with almost level outward-turned lip.
 20. Pedestal base, moulded, with hollow under-side. Very friable.
 21. Beaker with conical neck and simple thickened lip.
 22. Jar with inward sloping neck which is off-set at shoulder.
 23. Bowl of carinated form, with level, outward-turned lip.
 24. Jar with plain, outward-turned rim.
 25. Beaker, carinated type, thin-walled, small size of same class as No. 26 below.
 26. Bowl, carinated type with thin wall, a larger variant of No. 25 above. Both are typical of the period just prior to, and after, the conquest at Canterbury.
 - 27-29 inclusive.
Dishes of Belgic type, generally in soft under-fired 'soapy' ware, typical of the period covering the transition from pure Belgic to Claudian at Canterbury. Those found here are probably just post-conquest.
 30. Dish or small bowl with outward-turned rim which seems to have been originally level.
 31. Belgic bead-rim jar decorated on the shoulder with stab-marks.
 32. Belgic bead-rim jar with combing on body. Both this example and No. 31 above are typically native Belgic, at Canterbury, and probably of Claudian date on the present site.
- Note Nos. 27-29 inclusive, and 31-32, were found actually on the floor of the furnace chamber. As no similar vessels were found elsewhere on the site, except in a waste-heap of tiles near this kiln, it is fairly certain that they were made at this kiln and were not survivals in rubbish. The friable, under-fired texture of the fabrics of these pieces strongly suggests that they were products of this kiln.

Conclusions regarding the dating of the kiln

The pottery obtained from the kiln and its stoke-hole pit falls into two groups,

FIG. 8. Pottery from kiln (Area II), St. Stephen's Road, Canterbury. ($\frac{1}{4}$)

viz. Belgic and Roman respectively. The types in the former still retain much of their native forms and character; in fact without the presence of the second group a date just prior to the Claudian invasion would be reasonable. It is on the second group, however, that the dating depends. The flagons of type 1 are local renderings of a well-known mid-first-century form and although as yet these vessels have not occurred in any quantity in the Claudian levels in Roman Canterbury it is clear that they belong to that period or are Neronian at the latest. Accordingly, until the local distribution of the products of this kiln is worked out, a tentative date around the mid-first century seems reasonable.

Acknowledgements

Thanks are due to the following people who in their various capacities have assisted the work. The Town Clerk of Canterbury, Mr. John Boyle, LL.B., who as Hon. Secretary of the Canterbury Excavation Committee, took an active part in the excavations, as also Mr. Paul Woodfield.

The City Architect, Mr. L. Hugh Wilson, O.B.E., A.R.I.B.A., A.M.T.P.I., and the City Engineer, Mr. J. E. Rhodes, B.Eng., A.M.I.C.E., A.M.T.P.I., and staffs were most co-operative. The assistance of Dr. S. G. Brade-Birks, F.S.A.; Mr. Frank Higebottom, B.A., F.L.A., the City Librarian and Curator; Mr. Sheppard Frere, M.A., F.S.A.; and Mr. G. C. Dunning M.A., F.S.A., is much appreciated.

The author is very grateful to Dr. Philip Corder for reading the typescript of this report and making valuable suggestions. Finally a special word of thanks to Mr. Claude Jarvis, for it was entirely due to his keen observation, interest, and initiative that this important site was saved from destruction until archaeological excavations had been carried out.

Professor E. Thellier, Director of the Observatoire géophysique, Université de Paris, conducted tests on the walls of the tile kiln in order to determine the declination of magnetic north for the year of the last firing.

FIELDWORK ON AERIAL DISCOVERIES IN ATTICA AND RHODES

By JOHN BRADFORD, M.A., F.S.A.

INTRODUCTION

THIS report gives a brief account of a field reconnaissance in the Levant during August and September 1955. Seven weeks were spent in ground-checking archaeological sites noticed on air photographs taken by the Royal Air Force over Greece and Rhodes during the Second World War, and later in Cyprus.¹ Assisted by my wife, I was able in these few weeks to locate and to examine in detail a large number of archaeological features, as the consequence of having these photographs as a guide. I shall reserve for a future occasion the description of the results and discoveries from our work in Cyprus, which was based on (i) my study of some thousands of photographs which the Department of Lands and Surveys in Nicosia kindly made available, and (ii) ground-checks on foot in various parts of the island. A very helpful grant of £50 given by the Craven Committee in the University of Oxford contributed towards the cost of this short campaign in 1955. The work was in direct continuation of my field research in Mediterranean lands since 1945, with the emphasis extended for the moment to the eastern end. This was a planned sequel to discoveries which I had made years ago, and an opportunity to complete them with fieldwork on the ground had been long awaited.

The primary purpose was to obtain ground data on two particular discoveries which had come to light in the course of air photo interpretation:

1. Ancient field systems on the lower slopes of Mt. Hymettos near Athens.
2. Remains of the street plan of the Classical city of Rhodes.

A secondary purpose was to assess by observation at eye-level, and also from passenger aircraft, the potentialities for air archaeology of certain areas in this region. Among the latter the Gulf of Antalya on the southern shore of Anatolia suggested favourable possibilities.

PART I. THE TOWN PLAN OF CLASSICAL RHODES

RHODES made its appearance as a newly planned city in 408 B.C., with the combination of colonists from the three older towns of Ialysos, Kamiros, and Lindos. Its fame and wealth as a mercantile centre in the Ancient World are universally known.

But it is important to note that little had been established, until the last year or two, about the regular layout of its street plan, for which it was famous in Classical times, like Piraeus. Every schoolboy has heard of the 'Colossus' which served as a sea-mark for ships entering the harbours; this remarkable curiosity of construction has disappeared long ago, and neither air photography nor any other method of archaeology can restore its details. But of infinitely greater importance is the fact

¹ Plate VI is reproduced by kind permission of the Air Ministry.

that the street plan of the city itself can be seen and recovered. This fact is still not yet sufficiently appreciated. The purpose of the following account is to describe how this discovery has been made.

The topographical indications which show the layout of the Greek city were found by Mr. I. D. Kondis and by me, working independently and basing ourselves on separate approaches without prior consultation. In a similar manner Charles Darwin and Alfred Wallace, when thousands of miles apart, reasoned out their theories on Natural Selection, and both arrived at similar results! The agreement in general between our studies adds confirmation to each. The results of our conclusions have only gradually become available because of delays¹ in publication. In justice to air archaeology, I must make it clear that my own discovery was made directly and independently from that source, before I had set foot on Rhodes. It originated in 1950, when I was able to help our Fellow, Mr. T. S. R. Boase, President of Magdalen College, Oxford, in obtaining British war-time air photos for use in studying the medieval city. On examining these photos (e.g. pl. vi) I saw that they revealed new facts of great importance. They showed comprehensively, in the country districts outside the medieval city, the topographical traces of an ancient gridded plan—in short, the surviving remains of the layout of the Classical streets. These traces were easily visible, and are in fact preserved by features on the surface of the ground which have long been waiting for detailed and exact mapping. My book *Ancient Landscapes* contains a preliminary discussion of them.

The maps previously published (e.g. by Inglieri) were not sufficiently precise or detailed to show these vital facts. But vertical air views give us the 'total' mapping which is necessary in order to show the precise position and relation of *all* the small roads, field-boundaries, &c., which still exist. These preserve the ancient *διαίρεσις*. We can now see that there was a regular grid of lines which were sited north-south and east-west. This represents the streets of the ancient Greek city, and its chief buildings were based on these straight lines. My reconstruction of the street plan, shown on fig. 1 with its eastings and northings, is derived from the complete mapping of these features, which can be seen from the air and also on the ground—that is, when you take advantage of the aerial map in order to find them. My plan on fig. 1² was first shown in 1954 at Copenhagen, and in Oxford to the meeting of the British Association for the Advancement of Science; and in 1955 to the Joint Meeting of the Classical Societies at Oxford. Later, in October 1955, I was able to give to our Society this description of my fieldwork at Rhodes in September. In 1954 when I showed at Copenhagen and Oxford the comprehensive archaeological plan on fig. 1 there was no other comparable plan available.³ Soon afterwards Mr. Kondis sent me his article, published in Rhodes in 1954, which gave his reconstruction of the ancient street grid. Naturally excavation is

¹ The text of my report to the International Classical Conference at Copenhagen in 1954 is expected to appear in the *Acta* in 1956.

² The plan illustrating my present article contains a few additions resulting from my fieldwork in 1955.

³ The only new information was contained in the brief summaries, without town plans, in *Praktika*, 1951 (published 1952), pp. 224-45; and *J.H.S.*, 1952, p. 106; 1953, p. 126.

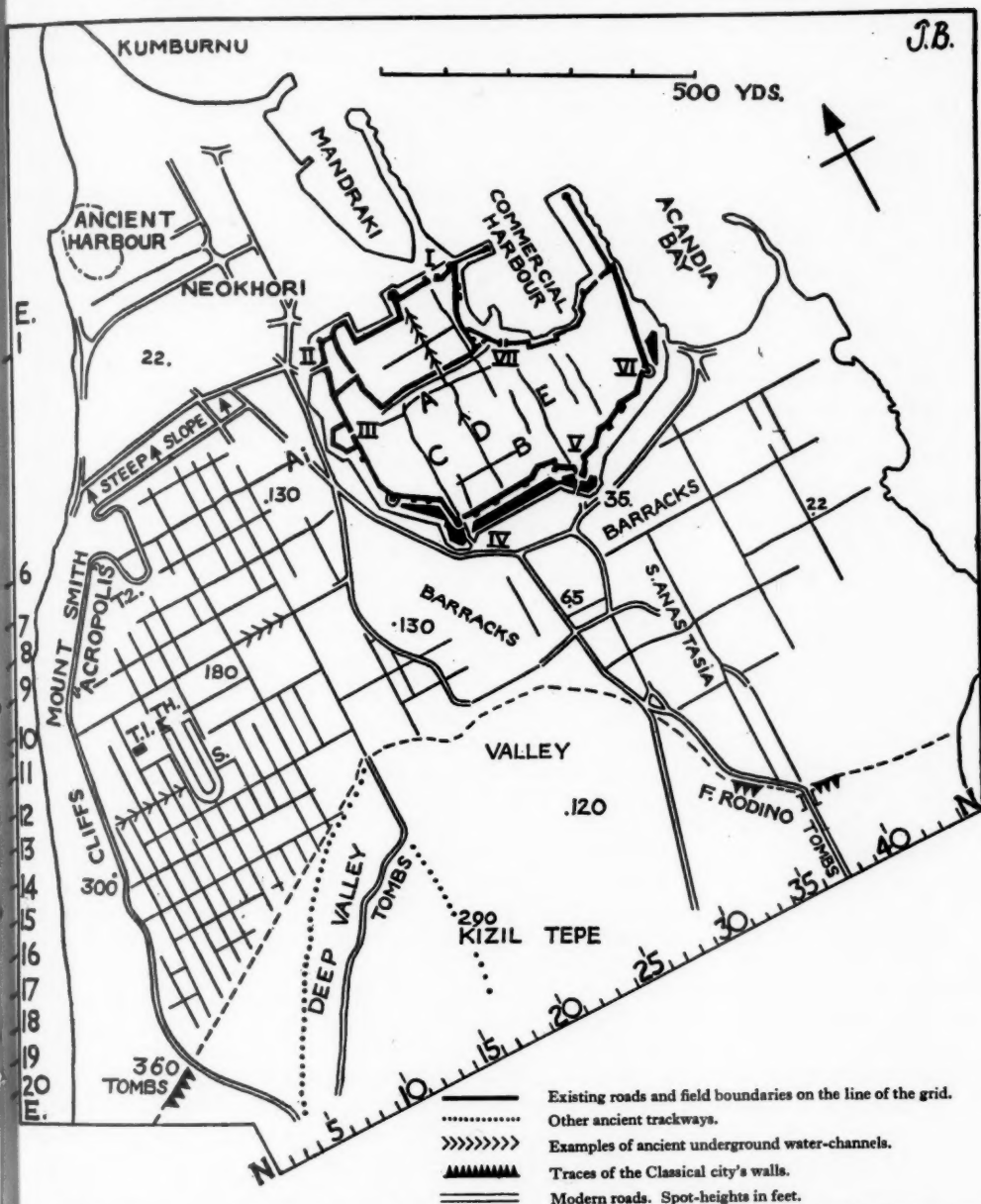


FIG. 1. Rhodes. The traces of the Classical town's gridded plan, mapped from data from air photos and from the ground.
 T. 1, Temple of Apollo; Th., theatre; S, Stadium; T. 2, Temple of Athena and Zeus

required to supply proof of these topographical discoveries, and the reports of Mr. Kondis's excavations have now given confirmation of several essential facts. I wish to take this opportunity of emphasizing the valuable results of his work,¹ and to thank him for his kind assistance during my visit to Rhodes in 1955. It was obviously the proper moment to share our studies, and together we visited a number of 'key' points and had many cordial conversations on the topographical problems. Two others helped me in my researches, the late Sir John Myres and the late Mr. T. J. Dunbabin, and I am very glad to acknowledge their friendly advice.

The chief fact—apart from the actual details of the plan—which impressed me personally when making this discovery from the air was the immense size of the city's area. Slight though they are, its vestigial traces today still give a clear understanding of its original power and magnificence at its acme. Rhodes is now scarcely more than a tourist centre and a minor port—a symbol of the degeneration and evanescence of power in commerce and politics. On the ground, the best view of the original extent of the great Classical city is to be seen from the low hills to the south, occupied by its cemeteries; from here one surveys the widespread area which it enclosed, five or six times the size of the medieval town which is only the shrunken core of a city far more extensive and glorious. Its eastern side was fronted by a line of harbours which are still in use today, and on the western side there are traces of an abandoned basin now on dry land (fig. 1 and p. 66). Inland the city included the long low ridge named Mount Smith, after the British Admiral Sir Sidney Smith who built the watch-tower on its summit during the Napoleonic wars. In the remains of the grid the rectangular units of division average about 105 yds. long by 55 yds. wide, as measured between existing country roads and other boundaries on the line of ancient streets. It seems probable that units of *stadia* (600 Greek ft.) were used as the original basis of the layout; and the more exact measurements from excavations support this. The plan as a whole is very similar to the gridded plan of fifth-century Miletus, which also covered a promontory in a similar layout. We should also compare the street plan at Olynthus in north Greece; on the North Hill the gridded layout of the late 5th–early 4th cent. B.C. was based on units of somewhat similar proportions, c. 99 × 44 yds. (as measured from the middle of one street to the middle of the next).

Until the last year or two the plan of Greek Rhodes was considered to be almost totally lost. It was not known *how* to begin to reconstruct it. Even in Professor Wycherley's admirable volume *How the Greeks Built Cities* (1949), Rhodes is only mentioned briefly, without any suggested plan. Some recent writers even expressed the opinion that its ancient plan had disappeared completely! True, the references in Classical texts are not sufficiently explicit to give much indication of the ancient town plan, and they alone could not help us to a solution. It had become absolutely clear that *only* field archaeology, and *not* the texts, could restore the town plan to

¹ Kondis, *Praktika*, 1951, pp. 224 seq. (work in 1951–2); *ΕΥΜΒΟΛΗ ΕΙΣ ΤΗΝ ΜΕΛΕΤΗΝ ΤΗΣ ΠΥΜΟΤΟΜΙΑΣ ΤΗΣ ΡΟΔΟΥ*, pp. 3–31 (Rhodes, 1954); *Praktika*, 1952 (published 1955),

pp. 547–91 (work in 1952). In the following references I shall refer to these works by the date of publication. *J.H.S.* 1954, p. 165; 1955 (suppl.) p. 16 mentions only a few of the results.



Aerial view of the site of the Classical city of Rhodes

(Crown copyright)



a. E. 14, west of Stadium, p. 63



b. N. 5, adjoining Temple of Apollo, p. 63



c. N. 4, west of Temple of Apollo, p. 63



d. N. 27 = Fig. 1, C. Hippodamus Street, p. 67

Examples of existing lanes preserving the alignments of Classical streets

Photographs by J. S. P. Bradford

us. Some suggestions on these lines had been made already by Sir Charles Newton and by Professor Maiuri, but they did not produce any plan of a unified entity.¹

If the plan of the ancient city could have been elucidated from references in Classical texts, such an elucidation would have been made long ago. It is, of course, well known that Strabo (xiv, 2, 8) stated that the same master architect built Rhodes and Piraeus, and that Aristote (*Pol.* ii, ch. 8) recorded that Hippodamus of Miletus laid out Piraeus. Another source (Eustathius) mentions that Rhodes was built according to the 'newer and Hippodamian manner'. But the floruit of Hippodamus is placed as the first half of the fifth century B.C., and Rhodes was founded in 408. Therefore, presumably, its plan was excuted by a later hand, working in the style of the master. Tradition associated Hippodamus with a grid plan of streets at right angles. Later, we hear of the existence of this type of layout at Rhodes, in the *Rhodiakos* of the orator Aelius Aristides (xliii, 6). In a rhetorical passage he refers to the area of the 'acropolis'—which here only signifies the upper part of the city—as having a terraced layout with plantations; he adds that the remainder of the city was also arranged in regular order, in which no part was in excess of the others, as if it were a house rather than a city. He described its streets as continuous from start to finish and not at all deserving to be called narrow; in appearance, a splendid city splendidly spread out in its magnificence in every direction. This speech was written soon after the earthquake of A.D. 142 or 155. Therefore the regularity of the Greek plan was still worthy of note in the second century A.D. There is, also, a passage in Diodorus (xix, 45) which compared the city, metaphorically, with a theatre, but only in a general sense.² A suggestion (seriously considered by Dinsmoor) that it had a radiating plan has been completely abandoned now. There are other references in Classical texts which have relevance to the city's plan, but none of them enables us to reconstruct it. But the size of the city was enormous, covering an area 1,200 yds. long and 1,400 yds. across at its base. Fig. 1 shows my reconstruction based on the remains which can, in fact, be seen at ground-level.

One gathers from Aristides that the planning of the outermost parts of the city was in terms of houses well spread out among gardens and open spaces—very similar, in fact, to the modern equivalent. On Mount Smith and south of the medieval town the lines of many of the ancient streets have been preserved by straight country lanes—because they were useful locally for communication. The aerial plan has been vitally important for showing their course precisely.

I wish to draw attention particularly to the following facts, shown by the air photos and checked on the ground:

(i) It is significant that traces of a unified grid are *only* visible *inside* the area which is bounded by the valley across the neck of the peninsula, for this valley was the line followed by the Classical city's wall, of which slight remains have survived the depredations of later periods.

¹ Newton, *Travels and Discoveries in the Levant*, 1865; Gabriel, *La Cité de Rhodes 1310-1522*, 2 vols., 1921-3; Maiuri, *Rodi*, 1921, and in *Clara Rhodos*, i, 1928; Inglieri, *Carta Archeologica dell' Isola di Rodi*, 1:50000, 1936. Short guide books have been written by Professor Karousos (1949)

and R. Matton (2nd ed. 1954, well illustrated).

² i.e. in connexion with flood-water which had collected in the lower town. Unfortunately the description by Diodorus of the siege of Rhodes in 305-4 B.C. by Demetrius, the 'Stormer of Cities', throws little light on the street plan.

The vestiges of the grid have been best preserved on the peaceful rural slopes of Mount Smith, in the form of long straight field-walls and country lanes. It is not surprising that their significance had been almost unnoticed by earlier archaeologists, because at eye-level the visibility is usually very restricted by plantations of ancient olive-trees, thus preventing a general appraisal.

It is clear that the lines of the grid originally ran all the way across the peninsula from the west to the east, although there are now naturally many interruptions in the lines. South of the medieval town the grid is best preserved by surviving roads in villages (e.g. S. Anastasia)—those villages formed after the Turkish conquest of 1522, when the remaining Christians were placed outside the walls of the medieval town.

(ii) Further, the remains of the following ancient monuments (mainly Hellenistic) correspond in their alignment to that of the grid:

- (a) The Stadium (second century B.C. according to Professor Maiuri).
- (b) The Temple of Apollo and its adjacent theatre (a second-century B.C. group).
- (c) Two recently excavated nymphæa in a long rock-cut face just south of this temple.
- (d) Underground water-channels, cut deep down into the rock.
- (e) Foundations of Classical buildings found by modern digging inside the medieval town.
- (f) The ancient bridge, on the east side of the peninsula, which carried the main road from the south into the city.

(iii) Several of the straight roads outside the medieval town can be traced as continued by those inside. Many of the streets inside the town are much straighter than the maps have shown. Only the British Town Plan, prepared during the 1939-45 War with the help of air photos, showed the exact positions of these streets. With precise mapping it could be seen that a number of them coincided with the regular divisions of the grid, even among the poorest and most rambling lanes of the town. Looking at the maze of small alleys one would not think that any Classical plan could have survived, *but it has*. For example, street C is distant from street D by an average distance equal to the width of 3 units in the grid (fig. 1), and street D is distant from street E by an average measurement equal to the width of 4 units.

(iv) Several of the straight roads outside the medieval town continue the alignment of streets inside (e.g. fig. 1, A and B).

(v) The enceinte of the medieval walls dates from 1310. But my plan of the grid makes it clear that, in fact, the positions of the medieval gateways numbered III, IV, V, and VI (fig. 1) were determined by the need to give a passage to roads which already existed and which had originated in the Classical grid.

(vi) It is also interesting to note that the positions of the long straight sectors of the wall and dry moat on the south and west of the medieval enceinte coincide precisely with positions which the lines in the grid would have occupied. It is intrinsically probable that these sectors of the walls were deliberately constructed on the conveniently open spaces given by pre-existing roads.

Now we must examine some of these facts in the greater detail which is required. I shall discuss them in the following order, (a) the so-called 'acropolis', i.e. Mount Smith, (b) the environs of the medieval town, (c) the medieval town itself.

(a) Mount Smith is a long low plateau nowhere more than 360 ft. high, steep-sided on the west and north. But, by contrast, the eastward slope down towards the city is very gradual, a continuous gentle slope falling to the level of the harbours. The term 'acropolis' has been applied by some writers to its topmost part, but it never had a particularly defensive character. There are no traces of an *inner* wall facing towards the lower city. On the contrary, the air photos, fieldwork, and excavation all show that the east-west streets continued right up on to the top of Mount Smith. The evidence indicates that the upper and lower parts of the Classical city were collectively united in plan. As applied to Mount Smith the term 'acropolis' signifies no more than the 'upper' part of the city. It would be wiser to abandon the use of the term here.

Today the terraces on its slopes are used in agriculture and for field-boundaries, but they are of great antiquity and they had their origin in streets constructed on a terraced principle, as part of the Classical grid. My ground-check in 1955 showed that many traces of the debris of ancient buildings can be detected along the lines of these country lanes, and recent excavations have consistently confirmed remains of Classical streets underneath them. As an additional proof of their pristine antiquity, the units of division are planned to the same size on the level plain as on the terraced hillside above. In 1955 I measured and photographed a great number of topographical features which preserve the grid plan, but I can only show a few examples here. Plate VII *a* shows part of a typical rough country lane on Mount Smith, on the east-west axis of the grid, and running at right angles to the Stadium from the west (fig. 1, E. 14). An underground Hellenistic water-channel has been found along its course. This narrow lane or path, only 2 or 3 yds. wide, represents the diminished width of an ancient street. Along the rough field-walls which border its sides one can still find square-cut blocks of stone from adjacent ancient buildings. For comparison, pl. VII *c* shows a view of one of the trackways on Mount Smith which preserve the line of an ancient street running in the opposite direction, from north to south, and built on a terrace. It stands a short distance west of the Temple of Apollo (i.e. fig. 1, N. 4). This was one example, among many, of the value of the air view for identifying ancient alignments. On the ground the terraced slope on pl. VII *c* resembles an ordinary hillside terrace constructed for cultivation. But this is not so, for when we study the air view we can see that it was part of the urban grid of Classical times; farther along its course northwards the stone debris of an ancient street can be seen on the ground. Plate VII *b* illustrates another north-south trackway on a Classical line (N. 5), immediately west of the Temple of Apollo. Along the left side of this trackway can be seen traces of a rock-cut vertical side, typical of ancient construction—while on the right, and parallel, the side of the track is demarcated by one of the *temenos* walls of the temple excavated years ago by the Italians.

The layout of the grid seems to have been dislocated by the steep slope at the north end of Mount Smith; also, extensive modern building (e.g. the new

boulevard, now called North Epirus Street)¹ has destroyed traces of 'walls' (probably ancient streets) noticed by Newton ninety years ago. These facts explain the absence of remains of the grid in this area on fig. 1.

The most interesting of the east-west lines in this area is that marked 'A. i' on fig. 1, now called Pindos Street. Today it is a narrow lane bordered by high stone walls enclosing old houses and gardens. Newton was the first to note that its rock-cut sides indicated its ancient origin. In *Ancient Landscapes* I have shown that it maintains the line of a Classical street which led from the site of the temple of Athena Polias and Zeus Polieus² near Sir Sidney Smith's observation-tower down to the probable site of the Agora (fig. 1, A, and p. 67) and the gate to the main harbour. It is regrettable that the relation between this temple and the grid is not yet clear.

Mr. Kondis has excavated at the western end of Pindos Street, (i) clearing away the accretions of later walls along the street and revealing the ancient walls behind them,³ (ii) exposing the ancient road-surface 4.2 metres wide, a regular width of Classical and Hellenistic streets. Pottery of the third century B.C. was found at the foot of an ancient wall bordering the street.⁴ At the extreme western end of the street, on waste land, excavations revealed foundations of a large building with a *stoa* whose north side lay along the street.⁵

During the last year excavations have exposed two long sectors of one of the straight north-south lanes in the vicinity.⁶ Until recently it was a quiet country lane, but modern houses are now being built along it. Again the authenticity of the grid was confirmed, it must be noted, by this excavation which revealed considerable remains of an ancient street, bordered by foundations of buildings, and underlaid by water-pipes. Pottery, which I examined *in situ*, showed that this street was at least as old as the beginning of the second century B.C. These excavations also show traces of small streets at right angles aligned east-west, in the sector between North Epirus and Chimara streets. Among several points of interest, I noted that (a) this street was truly terraced in construction in Classical times, (b) in places it was as much as 12 metres wide.

Another important street on Mount Smith on the east-west axis is Diagoridon Street (fig. 1, E. 11), a bare sun-dried road up which we trudged many a time and nick-named 'Hot Street'. In fact, this modern asphalt road preserves the line of the principal approach to a great group of ancient buildings: the Temple of Apollo, its Theatre, and the Stadium, all restored by the Italians.⁷ Adjoining these

¹ This runs along the line marked 'steep slope' on fig. 1. A practical difficulty for those studying the town plan is the identification of the modern landmarks mentioned in archaeological reports; all the roads have been renamed in Greek. A popular guide-book which gives their names is on sale in the Museum at Rhodes. Cf. K. 1954, p. 16.

² Little is known about the remains of this temple, for a report on the Italian excavations has not yet been published; architectural fragments are still lying in disorder. They also found walls to the south-east (K. 1955, p. 550). Nearby are

three rock-cut nymphaea, about which little has been published. ³ K. 1952, p. 238 and fig. 17.

⁴ K. 1952, p. 243.

⁵ K. 1955, p. 553, pl. 1 and figs. 2-3.

⁶ Near the north end of N. 17, between North Epirus and Chimara (E. 9) streets.

⁷ K. (1955, p. 551) refers to another temple, to an unknown god, north-east of the Temple of Apollo. The whole complex of buildings was excavated and restored by the Italians, but only brief communications have been given (Laurenzi, *Memorie*, ii, 25). K. 1954, p. 5.

monuments are (restored) vertical revetment-walls on the line of the Classical grid, and in general agreement with the description of terracing given by Aristides. Obviously the alignment of the Stadium was fitted to the grid. The architectural remains on this part of Mount Smith do not seem to go back beyond the fourth century B.C., and for the most part they are datable to the second century B.C.¹ But it must be emphasized that excavation has been, until now, only sporadic and incomplete. Confirming the Classical origin of Diagoridon Street, an ancient underground water-conduit has been found along its alignment; and another was found along New Zealand Street from north to south (fig. 1, south part of N. 17).²

Immediately north-east of the Stadium there lies an archaeologically important area,³ but its precise original function still remains mysterious. The air view shows (pl. vi) the existence of an unusually large open space, and, when this big square field is studied on the ground, it is clear that this was a zone cut out of the slope and artificially levelled in order to serve some architectural purpose. When excavating east of the Stadium up to 1939 Laurenzi exposed part of the foundations of a building which he believed to be the city's Gymnasium, but few details have been published.⁴ Adjoining the east side of the Stadium the ground is divided by many old field-walls and terraces which perpetuate the Classical grid, and some of these conceal traces of vertical retaining-walls similar to the wall which has been restored behind the Theatre. Originally the slopes round the Stadium must have been buttressed by a series of imposing revetments.

The best preserved parts of the grid are situated south and south-west of the Stadium, as I have shown on fig. 1;⁵ these are farthest from the present town and therefore less disturbed. In 1955 I spent considerable time in measuring, studying, and photographing the terraces and lanes (c. 9 ft. wide) in this important zone at the southern end of Mount Smith. It will be noticed that they clearly preserve the lines of the Classical *διαίρεσις*, and, in fact, I was able to find evidence (traces of rock-cut construction, walls, &c.) which confirmed the ancient origin of some as narrow streets. No doubt this part of the city consisted of houses scattered among gardens. Assisted by the precision of the aerial plan, a limited and economical amount of test-excavation should guarantee remarkably useful results. This is an area which merits intensive study.

(b) We next turn to the environs of the medieval town, going from south to north. The valley across the peninsula only gave defensive strength to the Classical city at its western end; in the centre and at the east end it is no more than a shallow stream-bed, dry. This was not a strong line for the perimeter, but it was the best that Nature offered. South of the medieval town the ground is level; significantly we find the same ancient units of division as were applied to the slopes of Mount Smith, but on this level ground they are preserved, not by terracing, but by roads

¹ K. 1955, p. 552.

² K. 1954, pp. 17-18; 1955, p. 572 and fig. 16.

³ Between Diagoridon Street (E. 11) and a steeply terraced field-bank (E. 13) on the line of the grid (fig. 1).

⁴ Some particulars can be found in K. 1955,

pp. 551, 563-8.

⁵ This part of the grid was omitted from Mr. Kondis's reconstruction of it (K. 1954, pl. 11), for which he used as a topographical basis the British Town Plan which did not include the south end of Mount Smith.

which have been in use throughout Medieval and Turkish times—for example Venetokleon Street¹ (E. 14), Mitropoleos Street (N. 36), Agios Georgios Street (N. 40). Obviously the last-named street originally passed through the medieval *Porte des Italiens*; this gate was blocked up in the final stages of the siege but the road has remained until today. A picture of Rhodes in about 1480, in Caoursin's manuscript, shows that south of the medieval town straight roads still ran right up to the foot of its walls. Since then, big Turkish cemeteries outside the walls,² and modern buildings (especially the large Italian barracks and racing track) have eliminated many of the lines in the grid. Also new straight streets have been added, but they can easily be distinguished from the ancient alignments, e.g. by comparing the British Admiralty Chart and town plan of the nineteenth century. I must mention two recent finds which further strengthen the case for the Classical grid. A water-conduit belonging to the ancient city has been located³ beneath the line of New Zealand Street, i.e. coinciding with part of N. 17 on my fig. 1. Foundations of buildings have also been excavated on the line of the present Chimara Street (E. 9) with pottery dating from the second century B.C. to late Roman.⁴

An important point must be noted here. Mr. Kondis's map shows the area between Pindos (E. 7) and Chimara Streets as divided by lines forming six east-west divisions of equal width.⁵ But only one of these (the lane E. 8) is preserved above ground, and in the text he has stated that these continuous lines marked on his map have not yet been proved to exist.⁶ I return to the evidence on p. 68.

Continuing northwards we reach the suburb of Neokhori; this is the part of Rhodes which has been most radically changed, especially as the result of building by the Italians. In the Middle Ages and until recently it was full of gardens—now it is covered by houses. But there is no doubt that the Classical grid covered this area. My map, however, shows only the topographical remains which are definite, and which can be seen on the air photo and on the ground. I have marked only two grid lines, preserved by streets—this is a conservative judgement but certain. Mr. Kondis marks another (his road 'P. 3'), indicated by an underground Hellenistic water-conduit which ran east-west but did not coincide with any present road above ground.⁷

After examining the ground I feel certain that the large oval depression now occupied by gardens, and which adjoins the west coast (see fig. 1), does represent the site of a Classical harbour, now silted-up. The picture in Caoursin's medieval MS. shows a large oval lake or marsh at this spot, almost connected with the sea. A harbour-basin on this side of the promontory would be most useful, for winds are very strong and variable, and it would often be more conveniently sheltered than the harbours on the east side. It would also agree with constructional remains found along the coast and with certain passages in Strabo.

(c) How extensively the plan of the medieval town shows the skeleton of its

¹ K. 1955, pp. 575-9, figs. 19-21 and pl. 11, described extensive foundations of buildings of the first centuries A.D. recently excavated in the gardens of the Venetokleon, the Girls' High School.

² Compare Rottier's engravings of 1826 repro-

duced in S. G. Zervos, *Rhodes* (Paris, 1921), figs. 445-8.

³ K. 1954, p. 18.

⁴ K. 1955, pp. 573-4, figs. 17-18.

⁵ K. 1954, pl. 11, p. 5-13.

⁶ K. 1954, p. 19, note 2.

⁷ K. 1954, p. 20.

Greek ancestor is a surprising fact which had not been fully demonstrated prior to the maps prepared by Mr. Kondis and myself; although, as is well known, Gabriel, Maiuri, and Inglieri had drawn attention to two or three streets which ran on an ancient line (e.g. the Street of the Knights). The best plan of the medieval town is still Gabriel's magnificent survey prepared on foot (*op. cit.*, fig. xxxv), but like all plans it was schematized and it did not show the way in which the alignments of streets inside and outside the medieval walls are continuous. To the archaeologist the air view on pl. vi tells a story instantaneously; at a glance one can appreciate the significance of the relative straightness of the streets which it shows. The occasional deflections from a purely straight line are of no importance—students of ancient town-planning will expect to see them. On fig. 1 I have marked (A to E) the five most important or at least ten streets which preserve a Classical layout.

Of these, one of the most important is the east-west alignment marked 'A'. It continues Pindos Street (A. i) outside and led straight down to the main gate opening on to the principal harbour. Originally it must have passed through St. George's Gate (fig. 1, III) but this gate was blocked by the Knights in the final sieges by the Turks. When first one studies the air photo there may be some doubt as to which of two streets should be chosen for the east-west line 'A': the northern line (Aghisandrou Street) or the southern line (Socrates Street). But, in reality, there is no difficulty. The solution to the problem is: both streets. The explanation is that houses and lanes (e.g. Polydourou Street) have covered a big open space between them: in medieval times this corresponded to a wide market-place, the *Magna Platea*, shown on Caoursin's miniature. Most probably this was the site of the Greek Agora. In Turkish times this thoroughfare was covered with shops and alleys—exactly as if the St. Giles' and Broad Streets of Medieval Oxford had been covered by tenements in the seventeenth century.

Homeros Street (B) is another obvious Classical survival, and this is of special interest because it continues the alignment of a country lane on Mount Smith, in spite of the absence of any gate in the walls. What tenacity ancient streets possess! On the north-south axis an important survival is Hippodamus Street (C). Plate VII d shows a view of its northern end taken by me in 1955—a narrow alley supported by flying buttresses and typical of these ancient streets. But the essential fact is that it is straight—at least by comparison with some of the other alleys!

Next in importance after 'A' is the alignment 'D', which also travels the entire length of the medieval town. The southern end of 'D' is named Agios Fanourios Street—north of Sophocles Street it is continued by Lachitos and then Pissandros Streets. The straight line oscillates a little, but this is the natural sequel to rebuilding along its course. At the extreme north end of 'D' there are remains of the Greek dockyards (*νεώριον*) excavated by the Italians, but like so much of their work the details have never been published. The position of the slipways for the ships proves that the sea-front of the Mandraki reached much farther inland originally. In this piece of open ground, between the Palace of the Grand Master and the back of the Archaeological Institute, excavation revealed the line of street 'D' as a wide paved surface repaired and enlarged in the Roman period. But under its

course, at a lower level, was the channel of a main water-conduit which was certainly of an older date. Studying this area in 1955 I noted with great interest the contrast between the great width of this excavated street and the narrow medieval alley (only wide enough to admit a donkey) which continues above ground its line to the south. Along the central part of the same line (D), digging inside the town has found the continuation of the main water-conduit mentioned. On its west side it is joined by seven other conduits which branch-off at right angles—smaller but of similar construction. These branches are spaced at regular intervals of about 100 ft.¹ From this regularity, and from the similarity of this interval to the size of house-blocks in Greek cities, Mr. Kondis believes that these branch-conduits indicate the former positions of minor streets above them, and he has marked their possible course on his plan. But it must be emphasized that the continuation of these subdivisions up the sides of Mount Smith has still to be proved. There is no evidence as yet that minor streets at intervals of 100 ft. were a uniform feature *throughout* the Classical plan, but this measurement seems to have been a definite sub-unit.

Farther east is Pythagoras Street (E), directed to the Koskino Gate. At No. 66 Pythagoras Street, excavations revealed big late-Hellenistic buildings, reconstructed in Byzantine times.² About 50 yds. to the west of Pythagoras Street (i.e. equal to one unit in the grid) lies the parallel north-south alignment of Sophocles and Euripides Streets (marked on fig. 1), and along these streets also, on the site of houses destroyed by war-time bombs, excavations located the foundations of Hellenistic buildings.³ It is clear that they stood on the lines of the Classical grid. Eastwards of Pythagoras Street are two straight streets in the old Jewish quarter which also coincide with the grid. In this same area, at the south-east corner of the Commercial Harbour, there was recently excavated a sector of the Classical city-wall facing the harbour, and a gateway. Their date certainly goes back to the second century B.C. and perhaps earlier; these remains lay a short distance inside the position of the medieval wall and parallel with its line. In 1955 I examined their strata.

Finally we consider the area of the *Castrum*, the upper part of the medieval town. It is still not certain if its walls preserved the outline of an acropolis overlooking the ports in ancient times. Inside, the famous medieval Street of the Knights preserves a line of the Classical grid, although probably it was modified in minor ways to agree with the position of medieval buildings. It is significant that the ground floor of the house of Villaragut, a Spanish knight of c. 1500 who lived on this street, has as its floor the surface of the ancient street; and it is also significant that the gate on the south side of the medieval *Castrum* coincided with the alignment of a Classical street (D). Gate no. 1, closed during the last Turkish sieges, was reopened by the Italians.

Conclusion. It was with some trepidation that I reported at the Copenhagen meeting of 1954 my discovery of traces of the Classical city over so wide an area

¹ The precise intervals between these branches varied from 30 to 35 metres (K. 1954. p. 12, note 1). It should be noted (i) that on the east side of the main conduit only one corresponding branch

was found, opposite the sixth from the north, (ii) the continuation of this main conduit farther south showed no branches. ² K. 1952, pp. 225-33.

³ K. 1952, pp. 234-6 and fig. 9.

providing a revolutionary reconstruction of its plan. Since then, the topographical evidence has been confirmed by excavation at the points which I have listed.

But the origin of the grid remains our crucial problem. Here we must judge from the evidence of excavation. Probably there was much rebuilding after the big earthquake of 227 B.C., and it is certain that the buildings excavated up to now date from the end of the third and the beginning of the second century B.C.—the great epoch of the city's glory and power. There is a lack of a uniform pre-Hellenistic stratum. Pot sherds of the fourth century which have been found are, it is stated, strays not *in situ*. The vital need is to find undisturbed strata which could prove if the plan derived from the origins in 408 B.C.¹ Mathematically, it seems that the *stadion* was used as the basis of division; perhaps based on the Doric foot which was longer than the Attic; careful measurements of the Stadium may determine this problem. Of no less interest is the survival of the streets in later times, and the few remains of Byzantine structures agree with the grid. But there is a clear absence of a post-Roman stratum outside the medieval town. The limits of the Byzantine town are not known, but presumably they had diminished to the area of the medieval town.

¹ A discussion of the 'Hippodamian' style in planning is given in *Ephemeris*, 1955, pp. 255-67.

Part II to follow.

NOTES

A Bronze Mounting from Oxshott Wood, Surrey.—Mr. D. M. Wilson sends the following note: The Department of British and Mediaeval Antiquities in the British Museum has recently been given a very interesting bronze roundel that was found some twenty years ago in Oxshott Wood, Surrey.¹ The mounting is 2.9 cm. in diameter and weighs 12.5 g. The decoration consists basically of an equal armed cross, at the centre of which is a quadrangular field with concave sides (pl. VIII a). This field contains a circular hollow, a setting perhaps for a semi-precious stone; surrounding this in corners of the quadrangle are four small circles. The arms of the cross are formed to produce a loose interlace pattern, which is given zoomorphic character by the addition of a small circular eye. The arms of the cross, to the point where the interlacing starts, are ribbed between two bordering lines; in the interlaced pattern these two borders are continued but grow closer together and no ribbing is present. The roundel is bordered by a plain grooved band. The carving of the face of the roundel would suggest that originally it had been gilded, the light would thus catch the different faces of the carving and cause them to glitter, but nothing remains to prove this hypothesis.

The back, which is very worn and pitted, shows no traces of a catch pin: this is a not uncommon feature of Late Saxon metalwork, but it is profitless to speculate on the use of the mounting.

The zoomorphic character of the ornament is seen in the eye feature and very possibly in the ribbing of the cross, which is perhaps in the tradition of hatched animal backs that occur frequently in the insular art of the three centuries before the Conquest. The end of the interlace is curved back on itself giving a suggestion of a snout. An interesting feature of the interlace is an angular break in the outer ribbon where the line curves towards the centre; this feature is perhaps a pale reflection of the broken backed Celtic curve, but it can be sufficiently explained as a formalization of a degenerate acanthus leaf that appears frequently in manuscript interlace ornament of a type illustrated by Sir Thomas Kendrick² and Professor Wormald,³ which can be dated to the early eleventh or late tenth century.

In style this mounting would seem to be very similar to two objects, escutcheons probably, which have been made into pendants and appeared in a Viking grave in Saffron Walden, Essex.⁴ These mountings have been illustrated by Kendrick who classes them in his 'soft' style. The ornament of the Saffron Walden pendants was much more complicated than the ornament of this mounting but the design is so closely allied that I think we can have no hesitation in ascribing our mounting to the same period and school of art. The back of the curves on the Saffron Walden pendants is not broken but there is an acanthus leaf on the curve which is part of the tradition we have already noted in the manuscripts of the period of the Bosworth Psalter. Writing of the mountings from Saffron Walden, Kendrick says, 'It is undeniably late work, probably mid-eleventh century.'⁵ This late date is perhaps difficult to justify and it is noticeable in this connexion that Brønsted had earlier dated them to the tenth century on both the manuscript and archaeological evidence.⁶ However, as the Saffron Walden pendants are the best pieces comparable with

¹ Reg. no. 1955, 10-2, 1. Given by A. Winter, Esq.

² *Late Saxon and Viking Art*, London (1949), pl. xxx.

³ 'Decorated Initials in English Manuscripts from A.D. 900-1100', *Archaeologia*, xci (1945), pl. vi b and c.

⁴ Kendrick, *op. cit.*, pl. LXXXIII, 2.

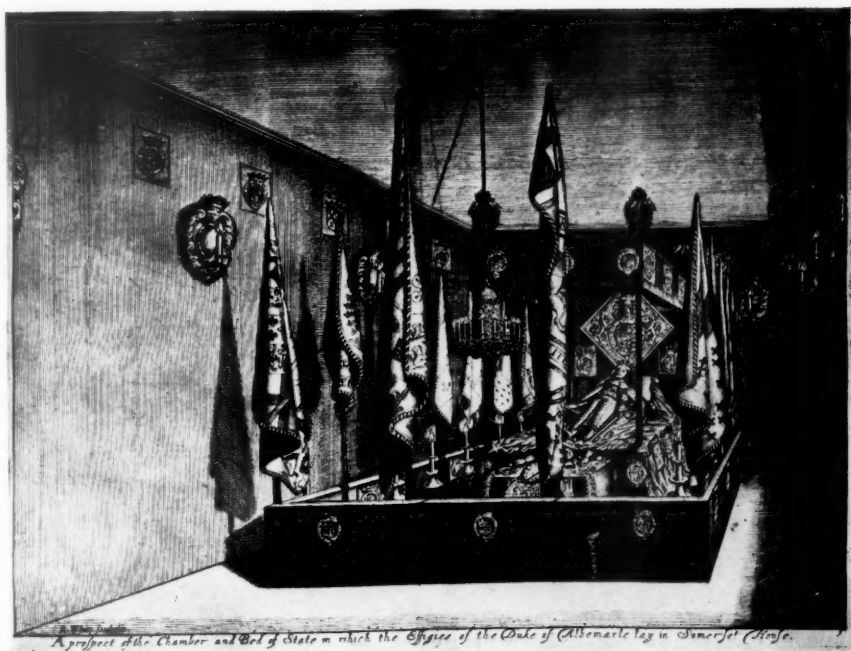
⁵ *Ibid.*, p. 38.

⁶ Brønsted, J., *Early English Ornament*, London/Copenhagen (1924), p. 255. Brønsted's illustration of this pendant is not quite correct in detail but this does not, I think, alter the reliability of his argument. It is perhaps worth noting that the Saffron Walden pendants were created secondarily from escutcheons and this suggests some period of use before deposi-



(Photo: British Museum)

a. Bronze roundel from Oxshott Wood, Surrey. ($\frac{2}{1}$)



A prospect of the Chamber and Bed of State in which the Effigies of the Duke of Albemarle lay in Somerset House.

b. The Duke of Albemarle lying in state, 1670. A Majesty Escucheon hangs above the head of his effigy

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the Oxshott mountings we must, for the moment at least, place the Oxshott mounting within the same period and date it according to our acceptance of Kendrick or Brønsted.

A Note on Hatchments.—Mr. Anthony R. Wagner, F.S.A., Richmond Herald, contributes the following: The most likely sources of further light on the problem posed by Mr. Bayley and Mr. Steer (*Antiq. Journ.* xxxv, 68–87) are the sixty or so volumes of Painters' Work Books in the College of Arms (see my *Records and Collections of the College of Arms*, pp. 26, 44 n.). These are the account books of seventeenth- and eighteenth-century herald painters, some working in the College of Arms, some outside, for their paintings of arms for various occasions, especially funerals.

For the most part the entries are in abbreviated forms which assume common knowledge of just the sort of things Mr. Bayley and Mr. Steer want to know. They are more concerned with the detail and correctness of the arms than with the forms of their representation. Here and there, however, one finds more detail, and a close examination and comparison of entries throughout the series might well clear up most of these problems for the period which they cover.

I can here offer only some scattered observations—which may yet be helpful. The first point to grasp is that the eighteenth century was the age of decadence of heraldic funerals, and if we treat the eighteenth-century sense of the word *hatchment* as primary we shall be apt to go astray. John Gibbon, who became Bluemantle in 1671, wrote: 'It was my hard hap to become a member of the Heralds' Office when the Ceremony of Funerals (as accompanied with Officers of Arms) began to be in the Wane.'¹ The eighteenth-century undertakers' funeral was a much watered-down version of the sixteenth- and seventeenth-century heralds' funeral.

Now the *hatchment* is simply the *atchievement*, that is, the full representation of shield, crest, helmet, mantling and supporters (if any), as opposed to the simple shield or *escutcheon* of arms. I suspect that a close examination of the work books would show a fair consistency in the observance of this distinction, though both terms are from time to time used loosely.

There is a distinct use of the word *atchievements*, in the plural, for the actual or suppositious accoutrements of the deceased, carried by heralds and others in the greater funeral processions; his helmet and crest, shield, tabard or coat of arms, spurs, sword, and so forth. This, however, scarcely concerns us here.

The regulations for the conduct of heraldic funerals made by the Earl Marshal in 1668 (I. 25, 105–106) referred to in sources quoted by Mr. Bayley and Mr. Steer (p. 72 n.) lay down in general terms the number, size, and material of the *escutcheons*, banner-rolls, standards, banners, guidons, and the like, proper to the funerals of different ranks from Archbishops down to Citizens of London, but do not mention the *Atchievement* or *Hatchment*. The work books are mainly concerned with silk, taffeta, and buckram *escutcheons* (according to the rank of the deceased) but do occasionally mention 'An Atchievement a yard and a half square' (O 2.97: 1687), 'a hatchment' (*ibid.* 108: 1687), 'one Ell Atcheivement' (*ibid.* 124: 1687), or such items as 'Two Atcheivements for Sir Will. Bromley of Baginton in Com. Warw. Kt. of the Bath, one of the Quarterings here expressed the other the Paternal Coat Impaling his ladyes' (*ibid.* 93: 1682), where the sketch shows that the crest was included. Here and there one finds an entry which makes it still clearer that the achievement or hatchment on panel or canvas and framed was quite a distinct thing from the paper and buckram *scutcheons*. For example, at Mr. Laury's funeral in

tion. A burial of this sort in mid-eleventh century England seems rather unlikely; but even if the burial did occur at that period it would seem more probable that the manufacture of the mountings from which the pendants were made would best be placed in the late tenth century.

¹ *Introductio ad Latinam Blasoniam*, 1682, p. 161.

1663 (Work Book I. B. 13, p. 74), '4 dozen of Buckeram Escowchings at 2d. the pieces' and '3 dozen of paper collored Eschowchings at 12s. the dozen' were provided. But in addition £3. 6s. 8d. were paid 'For an oyle Atcheivment of an Ell Square wrought with fine gold in oyle' and 4s. 'for the frame of boards with cramps and nailes and setting it up'. So too at Mr. Leueston's funeral in 1658 (*ibid.* fo. 36) an 'oyle atchievement wrought in oyle mantle helme and crest' was provided, and in 1659 (*ibid.* fo. 73), for Lady Griffin's, an 'oyle atcheivment of an ell square within a double gilt frame'.

This suggests that large framed achievements of arms, distinct from, additional to, and more permanent than the small paper or buckram escucheons, were often though not always used at seventeenth-century funerals. But it still leaves their shape—whether square or diamond-shaped—uncertain and does not tell us how they were used.

The second engraved plate in the printed record of 'The Order and Ceremonies used for and at The Solemn Interment of . . . George Duke of Albemarle . . . 1670', by Francis Sandford, Rouge Dragon, is 'A prospect of the Chamber and Bed of State in which the Effigies of the Duke of Albemarle lay in Somerset House', which shows hanging above the head of the effigy a large diamond-shaped hatchment of the eighteenth-century type, to which the text thus refers: 'at the head a Majesty-Escucheon, and another in the midst of the Tester (pl. viii b).' A Majesty is a tester and a Majesty-escucheon would mean either an escucheon fixed in the tester or the kind of escucheon customarily used in that position. Now the design of 1619 by Maximilian Colt for the great hearse of Anne of Denmark, Queen of James I,¹ shows in the centre of the tester an achievement of the Queen's arms on a black ground in a gold diamond-shaped frame. Archbishop Juxon's 'diamond hatchment' of 1663 in Wood's account quoted by Mr. Bayley and Mr. Steer (p. 72) was in this position.

The account for Lady Griffin's funeral in 1659 already mentioned has an 'Item for the Majesty escouchings of an ell square wrought on rich taffaty', and this seems natural for a hatchment in the tester, while for one fixed upright on the hearse panel might be more suitable. For Oliver Cromwell's funeral in 1658 eighteen 'majesties, wrought on rich taffaty, gilt with fine gold and silver, at 3 l. 10 s. a piece, with mantle, helmet and crest, supporters and motto' and 'three large atchievements in oil, two yards long, with mantle, helmet and crest, supporters and motto, gilt with fine gold at 15 l. a piece' were provided.²

Eighty years earlier at the funeral of Edward, Earl of Derby, in 1574, upon the hearse set up in his house at Ormskirk 'the Majesty, being of taffata lined with buckram, had thereon, most curiously wrought in gold and silver, the atchievements of his arms, with helm, crest, supporters and motto'.³ There are other references to Majesty escucheons in the work books which do not mention their material.

If further study confirms the view that what Wood calls a 'diamond hatchment' is distinguished in the work books as a Majesty escucheon, it will follow that the Atchievements 'of an ell square' or 'a yard square' there mentioned are square hatchments, i.e. with the sides vertical and horizontal.

Most of the painted heraldic panels described by Mr. Bayley and Mr. Steer show achievements of arms and it seems hard to deny them the name of hatchments. Most of them sound as if made to hang on hearses like the Duke of Albemarle's or Archbishop Juxon's rather than outside the house of the deceased, as eighteenth-, nineteenth-, and twentieth-century hatchments were and are. But we badly need more light on the history of this custom. The earliest definite piece of evidence I have yet found is the statement that between the death of Edward, Earl of

¹ Coll. Arm. MS. I. 1, fo. 1. reproduced in my *gress of Heraldry in England, 1793, pp. 282-3.*
Heraldry in England, 1946, Pl. XIII.

³ *Ibid.*, p. 250.

² J. Dallaway, *Inquiries into the origin and pro-*

Derby, in 1574 and his funeral, 'the chapel, the house, with the two courts, were hanged with black cloth, and garnished escucheons of his arms'.¹ The principle, however, is the same as that of the medieval lodging scutcheon, a painting of arms hung up outside an inn or house to show that its owner was lodging there. King René's *Livre des Tournois* depicts these, and the heraldry of Ulrich von Richenthal's *Chronicle of the Council of Constance* is taken from them.

I know only one actual survival of a possible midway type between the lodging scutcheons and modern hatchments. In the muniment room over the porch of Sherborne Abbey is a rectangular board painted with the feathers of the Prince of Wales encircled by his coronet, the initials of Henry Prince of Wales, and the date 1611—the year in which he was given the manor of Sherborne.² It may have been hung over the Castle Gate to signalize Prince Henry's acquisition of the lordship, and been moved to the church after his death in 1612. Beside it now hangs a late example of a square hatchment, that of the Countess of Bristol of 1709. The juxtaposition is no doubt accidental but suggests a possible line of development.

There is no need to suppose that all the instances collected by Mr. Bayley and Mr. Steer had the same origin or were made for the same purpose. Need we altogether dismiss the possibility that some of them were meant from the first for permanent church wall monuments—cheaper substitutes in wood for what we are accustomed to see in stone? The medieval wooden effigy is a good enough precedent.

The Roman Road at Baylham Mill, Coddtenham.—Mr. S. E. West sends the following note: The course of the Roman road from Colchester to Caistor St. Edmunds was first observed in 1823 in the fields at Baylham Mill, Coddtenham, immediately north of the point at which it fords the river Gipping. The road may still be seen, when the fields are freshly ploughed, as a gravel streak, changing direction slightly in the first field north of Mill Lane to follow a small ridge to the higher ground to meet the present-day Ipswich-Norwich road at Beacon Hill. A section of this road was taken in the first copse north of Mill Lane (National Grid Reference 62/115530), in the winter of 1953-4 by the Ipswich School Barclay Head Archaeological Society (fig. 1).

A 16-ft. stretch of the road was uncovered and found to be in good condition. The surface stones were roughly graded; larger stones, up to 4 or 5 in. across, were concentrated at the edges, particularly on the west; and smaller pebbles used in the centre. The extreme width was difficult to determine as the road was bounded by a ditch only on the east side, the western edge having spread and become confused with occupation debris. The section gave a positive width of 32 ft. with a thin scatter of stones spreading for 2 to 3 ft. beyond. The road was constructed of rammed gravel 1 ft. 6 in. in thickness laid on the natural sub-soil from which the surface humus had been removed. The ditch on the east, delimiting the road, was 7 ft. wide and 2 ft. 6 in. deep and appeared to have been kept clean until well into the third century. At the point of section the road was found to traverse a large pit containing two fragments of a Samian Form 27 and fragmentary course wares, including a small native copy of a Gallo-Belgic platter (fig. 2, 1), all of the Claudius-Nero period.³ The entire pit could not be excavated, the length of the portion cleared being 18 ft., increasing from a shallow tapered end to a width of 17 ft. and a depth of 6 ft. 6 in., and apparently still increasing. A 6-in. layer in the bottom of the pit contained a large amount of charcoal and a considerable quantity of iron slag. A little grey silt existed below this burnt layer and from this a much corroded bronze spoon handle was recovered.

¹ Dallaway, *op. cit.*, p. 249.

² R.C.H.M. *Inventory of the Historical Monuments in Dorset*, vol. i, 1952, pl. 25.

³ Platter of Gallo-Belgic form. A fine 'native' copy of a Gallo-Belgic terra nigra type; of hard

brown ware with a well-preserved black finish. The angles are rather rounded but the central concentric circles on the base and the mouldings are finely worked. Cf. Hawkes & Hull, *Camulodunum*, Form 24. Claudius-Nero.

Wedge between the stones on the edge of the road was a not badly worn *as* of Domitian as Caesar, fifth consulate, A.D. 77-78.¹ In the silt at the bottom of the road ditch a fragment of bronze openwork was found; which is considered by Mr. M. R. Hull of the Colchester Museum to be comparable to first-century military horse harness ornament on the Continent (fig. 2, 2).

CODDENHAM ROMAN ROAD

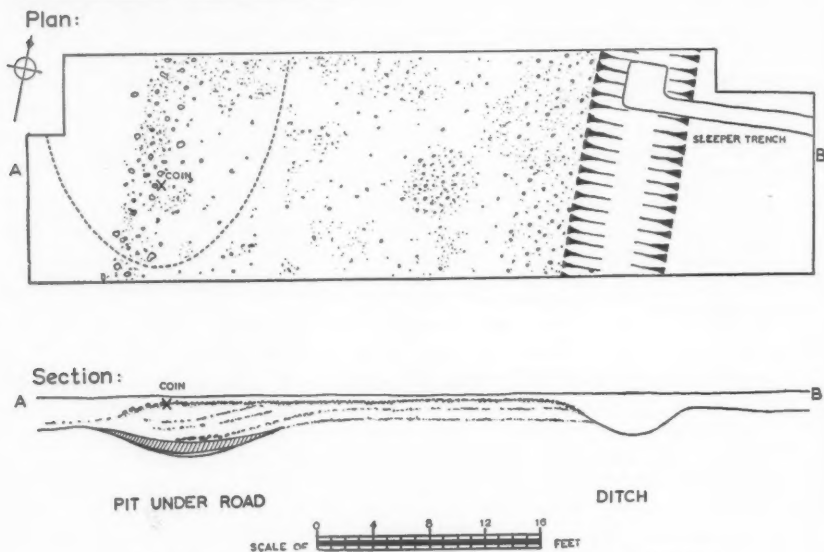


FIG. 1. Plan of section. Roman road at Baylham Mill, Coddendam

Apart from the coin of Domitian, three others were found on the road surface, all being of the third or fourth century. The road ditch apparently cut through the sleeper trench of an earlier building, but this has not yet been explored.

From this evidence, it may be deduced that the road was constructed about A.D. 70, there being

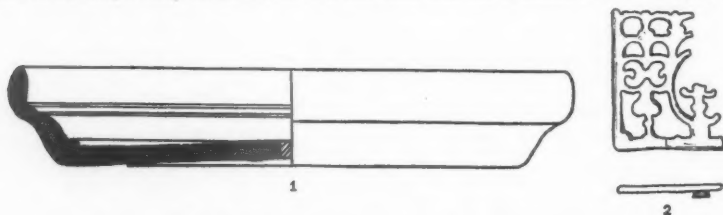


FIG. 2. Gallo-Belgic platter and bronze harness ornament ($\frac{1}{2}$)

some argument in favour of it being a military undertaking as a sequel to the rebellion of the Iceni. This date is further supported by the fact that the town of Caistor St. Edmunds was built about this date.

The discovery of a pit containing Claudian material led to an extension of the excavation to

¹ *M. & S.* (under Vespasian) 291 (a). I am indebted to Mr. N. Smedley for identifying this coin.

the west side of the road. Here a number of pits containing similar pottery were discovered; one with fragments of the Gallo-Belgic platter from the pit sealed by the road. A late first century structure was identified and further pits and an overall spread of pottery and coins carried the occupation of the site into the fourth century.

Little is known as to the nature of this extensive site as a whole but its importance as a focal point for the area is demonstrated by the five roads which radiate from it. Importance must also be attached to the bronze statuette of Nero and the mirror case with repoussé medallions of the same emperor, discovered in the 1820's and now in the British Museum. (The statuette is described as coming from Barking but there is evidence to suggest the site of its discovery was actually Coddendam.)

Evidence for post-Roman occupation of Chun Castle, Cornwall.—Mr. Charles Thomas contributes the following: The purpose of this note is to draw attention to some sherds discovered during the excavation of Chun Castle, in the Land's End peninsula of Cornwall, and to offer a new interpretation of them in the light of recent work.

Chun is an impressive hill-top fortress, guarded by two circular dry-stone ramparts, each with its outer ditch. Following spasmodic work in the nineteenth century, the site was examined by the late Mr. E. T. Leeds, who undertook excavation of selected features in 1925, 1927, and 1930. His reports were published in *Archaeologia*, vol. lxxvi ('First Report') and vol. lxxxi ('Second Report'). They indicate that the fort was used, and presumably constructed, by people using pottery which defines the Early Iron Age B period of south-west England—wares with curvilinear decoration, and with examples of the well-known 'duck' stamp.

There were, however, internal structures, including a roughly circular hut, a furnace, and radial walls which suggested small rectangular buildings sheltering inside the inner rampart. It was emphasized, particularly in the Second Report, that these structures were secondary to the main body of the fortress, and indeed it will be suggested here that some of them may be very much later.

Few entire vessels could be reconstructed from the collection of fragmentary sherds, but one such (Second Report, pl. xxiv, fig. 1) calls for comment. It was found, in pieces, in the base of a hearth belonging to hut C, a small rectangular site built against the inner rampart in the south-eastern quarter. From the excavator's description, it is clear that this pot was hand-made, of a plain buff paste; its exterior was blackened by fire; and the base was marked with the impression of grass (attributed to its having been built up on the natural turf).

This cooking-pot belongs to a class of post-Roman native pottery which has now been recovered from sixteen sites in mid- and west Cornwall. Unfortunately the pot itself cannot be found—inquiries at both the Royal Institution of Cornwall, Truro, and the Ashmolean Museum, Oxford, have proved unsuccessful—and the drawing I give here (fig. 1, A) is made from the photograph, aided by Leeds' careful description. The vessel is in all respects typical of what I have called, for want of a better name, 'grass-marked ware' (*Archaeological News Letter*, 5, no. 10, p. 190).

The grass-marked ware of Cornwall in its early stages appears to be virtually identical, in everything except the actual clay, with the so-called 'souterrain ware' of Ulster. The cooking-pot from hut C, Chun, should be compared with one from Shanee Park, Belfast (*U.F.A.* vol. xiii (1950), p. 21, fig. 7, no. 1), perhaps the closest of many parallels; others may be cited from Nendrum (H. C. Lawlor's *The Monastery of St. Mochaí at Nendrum*, pl. xvi), Kilbride (*ibid.*, pl. xix) and Larriban (*Antiq. Journ.* vol. xvi, fig. 5, no. 5).

The Chun pot, with its simple rounded rim and 'pure' shape, should be relatively early in the

Cornish sequence, the last stages of which exhibit similar vessels with everted and decorated rims and, at eight of the sixteen sites in question, bar-lug handles. The last-named feature, best represented at Gunwalloe, Gwithian, and Mawgan Porth (R. L. S. Bruce-Mitford, forthcoming

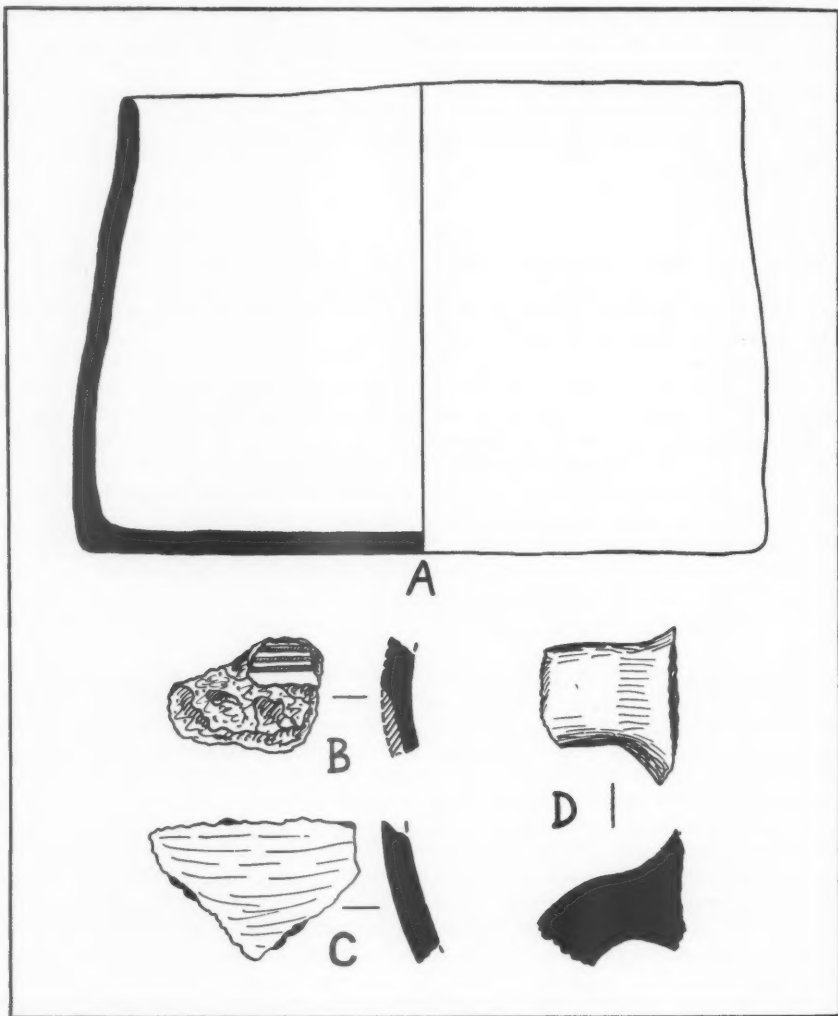


FIG. 1. Pottery from Chun Castle, Cornwall. ($\frac{1}{2}$)

publication), was in use in the tenth century, but may have been introduced in the ninth or even late eighth century on the evidence from Gwithian.

In the neighbourhood of Chun Castle, the Courtyard House village at Porthmeor (*J.R.I.C.* vol. xxiv, app. 1) was apparently deserted before the arrival of grass-marked ware; but, in spite

of the predominance of Romano-British pottery, the occupation of Porthmeor should be prolonged until the fifth century on the strength of various imported sherds. At Gwithian, three main occupation levels can with difficulty be distinguished in the blown sand. In the lowest, Trebarveth pottery, a local descendant of Romano-British wares and probably fifth century in date, is associated with an early phase of the various imported wares represented at Tintagel (*Antiq. Journ.* vol. xv; and discussion of the pottery by the excavator, Mr. C. A. Raleigh Radford, in the E. T. Leeds Memorial Volume, 1956). Grass-marked pottery first appears in the second level, together with what must presumably be a later phase of imported wares—the latter material is fragmentary, and awaits further analysis. The evidence of Gwithian, therefore, and the dates assigned by Radford to the monastery at Tintagel, point to somewhere in the sixth or seventh centuries A.D. for the introduction of grass-marked pottery into Cornwall. The whole problem is under review pending further excavation. The most likely source for the Cornish grass-marked pottery is obviously the coastal belt of northern and north-eastern Ireland, and an accompanying folk-movement is indeed suggested by tradition and the pattern of parish dedications.

If the Chun cooking-pot is assumed to belong to the period c. A.D. 500–700, this dating is strengthened by the occurrence, also in or with one of the secondary internal features of the fort, of sherds of an amphora or lagena (fig. 1, b, c, and d). These are from Leeds' class 5, First Report, p. 220. He illustrates three of them in his fig. 7. One is the handle shown here, but the rim and base have not yet been identified in the collection at Truro. This pottery, which is assumed in the report to fall within the Roman period, led the excavator to bring the final date of the occupation of Chun 'down indeed to a time not remote from the Roman conquest' (Second Report, p. 40). Re-examination of these same sherds shows that they are identical with fragments of vessels which may well start within the Roman period elsewhere, but which so far have only occurred in Britain in post-Roman contexts.

The most interesting sherd (b) is abraded and burnt, but enough of the original surface remains to show that it bears a distinctive decoration, made by holding a comb or some such toothed object against the body of the pot whilst the latter still revolves on the wheel. 'Combed', or comb-decorated, amphora sherds are known from Tintagel, in the first phases of the monastery (fifth to sixth centuries); at Gwithian, starting in the lowest level; at Garranes, co. Cork (*Proc. R. Irish Academy*, 47 C 2 (1942), fig. 19), dated by Ó Ríordáin to the late fifth and early sixth centuries; and at Cwrt-yr-Ala, near Cardiff, a site still being examined by Mr. Leslie Alcock. Similarly-decorated vessels are widely spread throughout the Mediterranean area. A sherd from Eleusis is shown in the Garranes report, and there are other examples from Byzantium (*per* Mr. R. B. K. Stevenson) and Chios (*per* Mr. John Boardman), whilst Professor Stuart Piggott has drawn my attention to another which he acquired from Palazzolo Acreide in Sicily. Whilst the bulk of these appear to fall within the range of the fifth to seventh centuries A.D., it would be misleading to imply a common source for all. Somewhere in southern Gaul or northern Spain seems the most likely for the British instances.

The Chun sherds have been compared microscopically with their suspected counterparts at Gwithian and Tintagel, which they match exactly in colour and paste. An abrasion pH test of three Chun sherds gives a mean of pH 8.2, compared with figures of pH 8.2 for Gwithian (three sherds) and pH 8.5 at Tintagel (two sherds). There can therefore be little doubt as to the identity.

Considered together, the grass-marked cooking-pot and the amphora sherds indicate use, and therefore possible reoccupation, of Chun Castle during the period c. A.D. 550–650. The present writer's interest lies only in the pottery, but the implications of this discovery, if it be sound, go farther. All the amphora sherds are marked 'A', Leeds' symbol for the furnace area, and some of them are clearly burnt. The furnace, admittedly a sophisticated structure for prehistoric Cornwall, was associated with both iron and tin slag, and has always been adduced as evidence for the metallurgical activities of the Early Iron Age inhabitants of the fort. Was this furnace

reused at a later stage, or alternatively, is the whole furnace post-Roman? Hut C would appear to be, and it would be interesting to examine some of the other internal buildings. Post-Roman iron and bronze working is suggested by the finds at Gwithian, and could clearly be shown at Garranes; the social background visualized by Ó Ríordáin for the latter site could equally well fit Chun.

The reoccupation of Early Iron Age forts in Cornwall is a subject that is still virtually unexplored. Maen Castle, a promontory fort at the Land's End, yielded a few sherds of grass-marked ware, though unstratified (*Proc. West Cornwall Field Club*, i. 3 (1955), p. 110); Trencrom is alleged to have produced others, and in mid-Cornwall both Castle-an-Dinas and St. Dennis could be expected on historical grounds to show post-Roman use. The work at Castle Dore (*J.R.I.C.* (NS) vol. 1, appendix, 1951) shows the scope that may be available in some of the larger fortresses.

I am grateful to those named in this note for information on pottery, and to Mr. Radford, who read the draft and made several valuable criticisms.

REVIEWS

Iran. By R. GHIRSHMAN. 7¼×4¼. Pp. 368. Pelican A 239. London: Penguin Books, 1954. 5s.

'The story of Persia from earliest times until its unique Iranian civilization was transformed by the Islamic Conquest' must inevitably be based on archaeological documents of the most varied kind, from Palaeolithic stone implements to the monumental architecture and *objets d'art* of the Achaemenians and Sassanians, together with literary sources written in Akkadian, Elamite, Old Persian, Aramaic, Greek, Pahlavi, and other languages of diverse families and discrepant scripts. Of course, no one can master at first hand all the diverse disciplines requisite for the interpretation of such a multiplicity of sources, but probably no one since Herzfeld's death is personally familiar with so many of them as Mr. Ghirshman.

Ghirshman has been celebrated for the last twenty years for his skilfully conducted and most fruitful excavations at Sialk, where he was able to distinguish stratigraphically no less than six prehistoric periods ranging almost from the beginning of farming life on the plateau to the development of a full Iron Age culture; and now he is directing the French excavations at Susa, where, of course, historical periods are even better represented than the proto-literate and prehistoric. Here his account of the prehistoric periods (pp. 28-72) is particularly authoritative, for it is based largely on his own discoveries, though full use is made of the sculptured monuments depicting Lullibi chieftains in the late third millennium.

In dealing with the advent of peoples of Indo-European speech in the Near East, the author has necessarily to indulge in speculation, and the Editor has felt it necessary to add footnotes on pp. 61 and 73 indicating the inevitably speculative nature of the author's reconstructions. Though seven plates are devoted to Luristan bronzes, it remains uncertain what historical events these archaeological documents reflect, but the treasure of Ziwiye, here called after the larger town of Sakiz, shows unmistakable Scythian influence. Ghirshman dates it to the first half of the seventh century, in contradistinction to Goddard who, in the original publication, argued for a substantially higher date, in particular for the gold plaque on which the Scythian motifs occur most conspicuously.

On the foundation of the Achaemenian Empire Ghirshman accepts the gold tablet inscribed in cuneiform characters of Ariaramnes, though admitting that some scholars have refused to accept its authenticity. There follows an excellent account of the organization of the Persian Empire, based largely on recently discovered and little known cuneiform texts, while it is interesting to have an account of the relations between the Greeks and Persians written for once from the standpoint of the Persians.

The value of the work is enormously enhanced by the 48 pages of half-tones, well chosen and in most cases most successfully reproduced. The Editor is to be congratulated on not having allowed the photographs to be reduced excessively, as all too often happens in books of this format. Only the three photographs on plate 15 are too small to be significant, but the photograph of stone tools on plate 1 means nothing either to the general reader or to a professional student of the Old Stone Age. The work has been translated from the French text published in 1951; any stylistic defects are due not so much to failures by the English translators as to flaws in the French text, which was obviously composed by one whose native language was not French.

V. GORDON CHILDE

Discoveries in the Judaean Desert I: Qumran Cave I. By D. BARTHÉLEMY, O.P. and J. T. MILIK, with contributions by R. DE VAUX, H. J. PLENDERLEITH, G. M. CROWFOOT, and G. LANKESTER HARDING. Pp. xi+165+pls. 27. Price 63s. net. Oxford at the Clarendon Press, 1955.

This fine volume is intended to be the first of a series which will deal with the abundant material from the Murabba'at Caves, the Qumran Caves II to VI, the Essene settlement at Khirbet Qumran, and the late documents of Khirbet Mird. This is what Mr. Lankester Harding promises us in his introduction to the present volume. We are glad to have from him, a first-hand authority, an account, in his own words, 'as accurate as it is humanly possible to make it', of the first discovery of the cave and its contents by two Bedouin shepherds. We learn from *The Biblical Archaeologist* that the Dead Sea Scrolls which had been taken to America by the Syrian Orthodox Archbishop of Jerusalem, have now been purchased by the Israeli government and will be assembled in the Hebrew University of Jerusalem with the other manuscripts from Cave I purchased by the late Professor Sukenik.

The present volume is published under the auspices of the Jordan Department of Antiquities, of which Mr. Lankester Harding is Director. Père de Vaux, whose competence is unquestioned, deals with the pottery found in Cave I; the linen textiles are ably discussed by Mrs. Crowfoot; and Dr. Plenderleith contributes a valuable note on the technical difficulties involved in the unwrapping of the many scroll fragments found in the cave.

The major portion of the book is devoted to the transcription, translation, where possible, and classification, of the vast number of papyrus and leather fragments found by Mr. Lankester Harding and Père de Vaux in their first excavation of the cave. No praise can be too high for the skill and patience with which MM. Barthélemy and Milik have carried out their very laborious task.

The Biblical books represented by the fragments are Genesis, Exodus, Leviticus, Deuteronomy, Judges, Samuel, Isaiah, Ezekiel, and the Psalter. The longest of these fragments come from Deuteronomy, Samuel, and Isaiah, perhaps bearing witness to the portions of the Old Testament most studied by the community of Qumran. The longest non-Biblical fragments belong to *The Sayings of Moses*, and *The Rule of the Congregation*, the latter amounting to two columns of over twenty lines each. Even the smaller fragments showing only one or two letters have a value for the palaeographers, while the longer Biblical passages have yielded some significant results for the textual criticism of the Old Testament. One important result of the excavation of Cave I, together with the data from the other caves, has been to refute conclusively those who have challenged the genuineness and relatively early date of the documentary material from Qumran and Murabba'at.

MM. Barthélemy and Milik are to be congratulated on the skill and accuracy with which they have executed their part, the greater part, of the production of the *editio princeps* which makes available for scholars the very valuable material from this first cave. The appearance of the fuller material from the other caves will be eagerly awaited. The Clarendon Press also is to be congratulated on the splendid production of the book, and on the competent way in which a very difficult piece of typography has been carried out.

S. H. HOOKE

Jérusalem de l'ancien testament: recherches d'archéologie et d'histoire. Par P. L.-H. VINCENT et P. M.-A. STEVE. I. Archéologie de la Ville. 11 x 9. Pp. xi+371+pls. 100. Paris: J. Gabalda et Cie, 1954. Fr. 10,000.

When war broke out in 1914 Père Vincent had been already engaged for some twenty years on a work called *Jérusalem antique*. One part had recently come out, dealing with the natural

features of the site; it was to be followed by a part on the archaeology of the town and others on the temple and its history. When peace was restored, the mandatory government was in existence, and a Department of Antiquities with a bold programme for excavations on Ophel, and it was obviously reasonable to suspend publication for the time being. Now with the relinquishment of the mandate after a second world war the author thinks it may be long before researches are resumed and that there is no reason for further delay. The present volume is a continuation of the work started before 1914 under a new name and with such new material as has been accumulated in the interim.

Jerusalem is a difficult place to dig and the valleys where there is most to find are the most difficult places in it. The number of excavations has been fewer in consequence and the new material less than was hoped. Discoveries of the first importance, however, have been made in the courtyard of the Citadel and against the north wall of the city and casual works have revealed more of the Antonia and one of the main streets. No work, on the other hand, has been attempted on the majority of the subjects discussed in this book, and we are still dependent on the interpretation of literary texts to a far greater extent than readers of it might gather.

The discoveries made near the so-called Tower of David are the most interesting and the most controversial. The excavations which were confined to the courtyard of the Citadel were directed by Mr. C. N. Johns and extended over many years. The Tower of David is identified with the tower which Herod called Phasael and it was, according to Josephus, built by Herod into an older wall which was the work of 'David and Solomon and the following kings'—a vague phrase which reads more like a piece of folklore than a genuine tradition. Johns found the 'older wall' but though there was evidence that it had been rebuilt three times, the stratification showed that the oldest part was not older than the second century, the Hellenistic or Maccabean period.¹ And—a more important fact—the wall in its principal phases resembles so closely the wall found by Bliss and Dickie south of the city that this wall too must be assigned to the same date. The chief evidence, the only material evidence, for the early extension of the walled city to the western hill thus falls to the ground. During the monarchy, on present evidence, Jerusalem within the walls did not extend beyond the Tyropoeum valley; it was a little place like all the other cities of the Early Iron Age which have been excavated recently, none of them covering more than eighteen acres. And as late as the reign of Antiochus III (198 B.C.), as we may remind ourselves, Polybius referred to Jerusalem as a mere annexe to the temple and it is to the same Antiochus and his Tobiad supporters that Josephus attributes the expansion of the city (*Ant.* XII, iii and iv).

The discoveries under the Damascus Gate, on the other hand, confirm what Vincent alone almost among archaeologists has been long contending. Under the west tower Mr. Hamilton found the bottom course of an older tower, built on the same plan as the present tower but slightly larger, in good Herodian style and manifestly therefore a relic of Agrippa's wall, the famous Third Wall of Josephus.

The volume has been splendidly illustrated. Most of the photographs were taken by Père Savignac who was an admirable photographer, and Père Vincent himself is a no less admirable draftsman. The illustrations of the tombs in the Kedron valley and those of the tomb of Queen Helena of Adiabene will enable archaeologists who cannot visit the site to form an adequate idea of these curious monuments—details like the oddly inorganic foliage on the friezes on plates LXXXVIII and XCII remind one of the designs on the late 'Megarian' bowls from eastern sites in Palestine, Syria, and Anatolia.

For years Père Vincent has been the doyen of the archaeological community in Jerusalem. There must be thousands who have accompanied him on his walks through the old city, and many

¹ The date is not accepted by Père Vincent who points to a fragment of boulder masonry in the bottom of the wall in one place as proof of its earlier

date. He ignores masonry of the same type at Samaria which cannot possibly be of the Israelite period.

like the writer to whom he has endeared himself by the help he has given them in their difficulties. They will rejoice that he has been able to crown his works on Jerusalem with this magnificent record of its older monuments.

J. W. CROWFOOT

The Art and Architecture of Japan. By ROBERT TREAT PAINE and ALEXANDER SOPER. The Pelican History of Art. 10½ × 7. Pp. xvii + 316. London: Penguin Books, 1955. 45s.

In this volume of the Pelican history of art (which is the first appearance in this country of the continental multi-volume universal art history) two American scholars give the best précis of its subject which has been published so far in English. By art Mr. Paine means painting and sculpture, and while he acknowledges the role of craft and the guild system in determining the character of the most truly native part of Japanese art, he does not attempt to include an account of it in his brief 155 pages; nor does he give more than a brief glance at the glyptic and ceramic art of the prehistoric period preceding the introduction of Buddhism in the course of the second half of the sixth century A.D. That is justifiable, for the break in the tradition of expressive art is quite complete. A great merit of Mr. Paine's treatment of religious art is his classification as far as possible according to temple craft traditions characterizing the icon sculpture of different Buddhist sects. Thus he speaks of the Toshodaiji style, in which wood sculpture supplanted dry-lacquer modelling in the late eighth century, and in the ninth and tenth centuries he distinguishes the sculptural and painting styles of the Tendai and Shingon sects. In the account of painting some of his best pages are those describing the scroll paintings, secular and Buddhist, of the twelfth and thirteenth centuries, and those treating of the quintessentially Japanese art of Korin and Koetsu in the seventeenth century. At times we feel that the author is constrained by consideration of space—and of the comprehensive treatment expected of him—from pursuing more speculative lines of thought, but that does not detract from the value of his excellent factual account.

Dr. Soper treats his half of the book rather as an essay, on the theme of technology and function in Japanese architecture, selecting facts to document without trying to be exhaustive. He has an impressive command of his material, be it standing, excavated, or literary, from prehistoric hut to the lush seventeenth- and eighteenth-century buildings of the Tokugawa age. Bracketing systems are shown with exceptional clarity in his line drawings. In the Heian period he interprets the change in temple plans and consequential development of roofs in terms of altered ritual requirements. He makes some striking comparisons with Chinese methods. Of the bracketing system of the 'Chinese Style' of the twelfth century, he says: 'the Chinese ideal unity of exterior and interior survives only as a fiction', this being made possible by the thoroughly insular custom of erecting a frame roof. He contrasts Japanese buildings with Chinese monumentality; and speaking of the lesser contrast between the dwellings of commonalty and quality in eighteenth-century Japan compared with England he says adroitly: 'The Japanese equivalent for marble and a giant Palladian order is usually a better quality of the standard house materials, and superior workmanship.' No better brief introduction to Japanese architecture could be wished for.

The book has 173 half-tone plates of good average quality, though some are too small in scale.

W. WATSON

History of Technology. Vol. 1. From Early Times to Fall of Ancient Empires. Ed. by CHARLES SINGER, E. J. HOLMYARD, and A. R. HALL, assisted by E. JAFFÉ, R. H. G. THOMSON, and J. M. DONALDSON. 9½ × 7½. Pp. lv + 827 + pls. 36. Oxford: at the Clarendon Press, 1954. £7. 7s.

The publication of this, the first volume of the History of Technology, is an event of great importance, and it will be a boon to many besides archaeologists, even if few will be able to afford

to possess it. The Editors describe it as 'covering the field of how things are commonly done or made, extending it somewhat to describe what things are done or made', and their choice of subjects is limited by two factors, space and the imperfect state of knowledge, besides which they omit subjects adequately dealt with elsewhere, like medicine. This volume treats the period from early times to the fall of Ancient Empires, but after the primitive beginnings the field is deliberately narrowed down to emphasize the cultures of the Near East, in which lie the roots of our own civilization. The scope of future volumes is only indicated in the most general way in the preface, but it is stated that the Far East will be omitted, a gap which will presumably be largely filled by Dr. Needham's great work on China. I assume that the New World will be omitted also; although the fact is not stated, its relations with the Old World, if any, must be with the Far East, so this is logical.

Even with these limitations, the scope of the volume is extremely wide, and the humane spirit in which the subject is treated is shown by the inclusion of Basic Social Factors as the first of seven Parts. This Part sets the stage with Dr. Oakley's *Skill as a Human Possession*, continuing with Professor Childe's *Early Forms of Society*, and articles on Discovery, Invention and Diffusion, Speech and Language, and Primitive Time Reckoning. Part II deals with the Food Collecting Stage, and here Dr. Leakey supplements archaeology by his own skill in stoneworking, and Professor Forde is obliged to draw heavily on modern ethnological parallels in discussing Foraging, Hunting, and Fishing. Part III is entitled Domestic Activities, and Part IV Specializing Industries, but here the grouping is rather unexpected and perhaps arbitrary, since we find Rotary Motion in Part III and Textiles, Basketry, and Mats in Part IV, while Building in Wattle, Wood, and Turf is in Part III, and in Brick and Stone in Part IV. Part V, The Utilization of Metals, includes, besides the obvious subjects, Mining and Quarrying and Fine Ivory and Wood Work. Part VI deals with Transport, by land and water, and ethnological parallels have again to be invoked in the latter to fill out the picture. Finally, Part VII, with Recording and Writing, Measures and Weights, and Ancient Mathematics and Astronomy, is called The Preparation for Science. The whole is preceded by a series of chronological tables by Professor Zeuner, which wisely extend back into geological time, since nothing is more commonly misunderstood than the time scale. These are followed by eight maps, which have been criticized elsewhere as 'just adequate for their purpose, but that's all', though the Editors are to be commended for refraining from making folders of them.

The Editors have chosen their authors very carefully, and most of the articles are by the acknowledged experts on their subjects. To add only three names to those already mentioned, he would be a bold man who would question the opinion of Mrs. Crowfoot about anything to do with textiles, or of our Fellows Mr. Maryon and Dr. Plenderleith about metalwork. These names give an indication of the quality of the subject-matter of the book, and after a fairly extensive use of it I can say that it is unlikely that many errors will be found to be corrected in a later edition. The large number of drawings and the plates with which it is illustrated are of excellent quality. The Editors say that the work is intended for continuous reading, being designed as a course of study, but such is the frailty of man that I suspect that most users will read first those chapters which particularly concern them, a course which the inevitable bulk of the volume will encourage.

In planning and co-ordinating this great project, with some of the authors overseas, the editors have undertaken a gigantic task. For Volume I we owe both them and the Directors of Imperial Chemical Industries, who sponsored the work, our warmest thanks.

G. H. S. BUSHNELL

Geschichte des Eisens. Von DR. OTTO JOHANNSEN. 11 $\frac{1}{4}$ × 8. Pp. 622 + pls. 433. Düsseldorf: Verlag Stahleisen M.B.H., 1953.

This large and beautifully produced book, sponsored by the Verein Deutscher Eisenhüttenleute, and written by so well known an authority as Dr. Otto Johannsen, is to be welcomed as filling a very decided need for a general, and so far as it is possible, complete, history of iron in the light of modern research. Much has been written upon iron, prehistoric and ancient, but even today our knowledge of the early history of the industry cannot be said to be complete, and the serious student is faced with the task of reading a formidable number of books and papers, both archaeological and technological, dealing with the subject. Dr. Johannsen ably summarizes the bulk of the known evidence for the industry from the prehistoric periods down to modern times. While he does not unduly expand upon the more abstruse technical details within the narrower field of pure iron metallurgy, he provides ample matter for the general technologist; while the archaeologist or antiquarian will find a full and authentic survey of the discoveries and processes upon which the iron industry has been built up through the centuries.

The opening chapters of the book deal with prehistoric and early iron in Western Europe, Africa, India, and China; a long and important section is next devoted to the history of iron in Europe during the middle ages. The final chapters give an account of the development of charcoal iron, and the more recent expansion of the iron industry when coal and coke became available as a general metallurgical fuel. Here, the author's discussion of the techniques, plant, and machinery involved, carry us down to modern practice. Apart from their general interest, these later chapters are well worth careful study, because recent research has shown that certain ancient processes are not so very far removed from comparatively recent ones, and the study of later methods may often prove most helpful to the proper understanding of much earlier work. For instance, as more becomes known of the structure of the early irons and steels, through the application of metallurgical and metallographic research, we find that techniques which could well be considered as quite advanced in a medieval context, may be traced back to Roman, or even earlier times.

Dr. Johannsen is to be complimented for drawing attention to the remarkable achievements of the Chinese in the early production and utilization of cast iron. It would now appear to be well established that the Chinese were the first people to make serious and extensive use of cast iron, and indeed, to have built up what may almost be termed a heavy industry in this material. Hence, they were far in advance of the Western World where cast iron was not widely or seriously used in any form before the fifteenth century A.D. An interesting point is touched upon by Dr. Johannsen, who mentions the possibility that the Chinese never used bloomery iron, but from the beginning used cast iron as their basic material; when wrought iron was required it would have been obtained by processing cast iron. Such a practice would be quite contrary to that of the West, where the whole iron industry, from prehistoric to medieval times, was built up upon bloomery iron. On the other hand, such conditions may well be true for the Shansi region where a special relationship of fuel and ore undoubtedly gave rise to an intensive development of cast iron; but China is a vast country and it would indeed be strange if bloomery iron did not find its customary place in many other parts of the country. For an answer to this, and many other problems of ancient Chinese metallurgy, we must await the result of Professor J. Needham's remarkable research, based upon ancient Chinese texts, which will appear in due course in *Science and Civilization in China*, volumes 6 and 7.

With the exception that the various damascene processes could with advantage have been more fully dealt with, Dr. Johannsen gives an admirable survey of the rise of the iron industry in the West up to the middle ages. For the prehistoric periods the author's chronology would appear, for some regions, to be too high. Surely that remarkable, and still not satisfactorily explained,

appearance of early bronze at Ur requires some writing down from the original dating at between 3500 and 3200 B.C. Again, the author inclines to a somewhat early dating for the appearance of iron in Egypt. The suggestion that smelted iron was of early occurrence in Egypt has perhaps been unduly based on the well-known IV to VI dynasty pieces from the Great Pyramid of Giza, Saqqarah, Abydos, &c.; but there seems to be decided doubt concerning the archaeological horizon of these finds. Actually, it is probable that Egypt was one of the last of the great civilizations to enter the full Iron Age. There is much need for further scientific examination of early Egyptian iron, such as Tutankhamen's dagger, in order to give us reliable information concerning early Egyptian iron, of meteoric or terrestrial origin. From the scanty technical evidence which is available, no doubt smelted iron gradually became known to the Egyptians during the New Kingdom, possibly after 1400 B.C., but the metal cannot have been well established as an industry until some centuries later.

In treating the prehistoric iron in the Near East and other regions, certain technical points must remain an open question for the time being. For instance, in the case of the famous Ras Shamra axe mentioned by Dr. Johannsen, are we certain that the material of the axe-blade was in fact meteoric iron? The analyst who examined this implement, Leon Brun, at first thought that the iron was of meteoric origin, but analysis and microscopic examination showed that it was probably made from pyrrhotite, a magnetic mineral containing from 2 to 5 per cent. of nickel. In certain cases the task of distinguishing meteoric from terrestrial iron is a most complex matter, and one upon which further research upon any material available is greatly needed. The author closes his survey of early iron in the West with an account of the techniques employed in the Hallstatt and La Tène cultures. Here, Dr. Johannsen clearly shows the progress made by the ironworkers, not only in the quantity of iron produced, but also in the art of forge welding, and of the hardening of iron which had its carbon content increased so as to bring it within the range of the carbon steels.

Possibly the most valuable and important section of the whole book is the long chapter devoted to the history of iron in Europe during the middle ages. Here will be found much new material of the greatest interest to the archaeologist and technologist. The great bulk of the iron produced during the middle ages was made by the direct reduction, or bloomery process, and the author must be congratulated upon his exceedingly complete and clear treatment of the subject, in particular for his admirable handling of the evolutionary series of the furnace and hammer. It is true to say that the rise of the iron industry is so closely linked with that of the furnace that the two must be treated together; the author's text, accompanied by a very good series of drawings and photographs, will enable the evolution of the furnace to be followed with ease. There are certainly gaps in our knowledge of Roman and pre-Roman furnaces, for it is most unusual for an excavator to be lucky enough to discover a complete furnace; theories built up upon incomplete evidence, and by those unfamiliar with the practical technology of iron founding, have sometimes led to an unfortunate over-typology of early furnace types. Dr. Johannsen's wide knowledge of the subject has enabled him to avoid such pitfalls. He brings out a striking example of furnace continuity, which is not always realized, in that we find the small bloomery (Rennfeuer), as well as the large shaft furnace (Stückofen), common in the middle ages; the one a prehistoric, and the other a later type of furnace. Both survived on into the seventeenth century A.D., and possibly to an even later date. Fundamental matters such as mining, the preparation of the various ores, charcoal, and other fuels, are dealt with. Also the application of water power to the bellows in order to give a strong and continuous supply of blast air, a feature which enabled a most marked advance to be made in the production of later iron.

The relationship between iron and steel during the early days of the iron industry is an exceedingly important matter upon which the archaeologist has heretofore had little guidance, and to this subject the author devotes considerable space. In a measure, the material which, in a general

way, we now call steel was occasionally produced from the late Iron Age onwards. Also it would seem that the steel-like qualities which can be imparted to an iron by smelting certain selected ores was realized from very early times. However, as Dr. Johannsen points out, even in the middle ages the true nature of steel was only guessed at. It is, of course, true to say that the early worker could have had no scientific understanding of the structure and properties of the metal with which he dealt. Hence, we can only the more admire the long and patient experiments which rendered possible the fine work produced by the early and medieval sword and tool smiths, who could not only convert their iron to come within the range of steel, but could also go on to that most difficult operation—the heat treatment and subsequent tempering of the product. As well as the major discoveries of iron, steel, and cast iron, many other aspects of the art of the smith are described. Indeed, the author gives an excellent review of the customs, traditions, and work of the ironsmith, particularly the work of the German smiths during the medieval period.

Enough has been said to indicate the value of *Geschichte des Eisens*. In fact the work may well be considered as a standard one for those who require an authoritative history of iron with particular emphasis upon the medieval period, and the early mechanization of the industry. The only real criticism which may be made concerns the absence of bibliographical references. Dr. Johannsen must have consulted a very great number of books and papers, and, while these may not be necessary to the antiquarian, they would certainly provide a mine of information for the research worker in the metallurgical field.

H. H. COGLAN

Excavations at Star Carr, an early Mesolithic site at Seamer, near Scarborough, Yorkshire. By J. G. D. CLARK, F.B.A., with Chapters by D. WALKER, H. GODWIN, F.R.S., F. C. FRASER and J. E. KING, and with an appendix by JOHN W. MOORE. 11 x 8½. Pp. xxiii + 200 + pls. 24 + fig. 80. Cambridge: at the University Press, 1954. 63s.

This book, which constitutes the closest thing to a model excavation report which this reviewer has ever seen, is an important contribution to our knowledge of the prehistory of north-western Europe. It is a publication of which both the author and the publishers may be justly proud. It deals with a bog-site discovered in 1947 by Mr. John Moore that is situated in the flat carlands of the eastern end of the Vale of Pickering about 5 miles south-south-east of Scarborough in the parish of Seamer. Surface indications suggested that it would prove to belong to a British facies of the Danish Maglemosian. However, Dr. Clark's brilliant excavations conducted during the three-year period 1949–51 under the auspices of the Prehistoric Society and the Department of Archaeology and Anthropology at Cambridge, as well as the associated work in the Seamer-Flixton area, have yielded important new evidence bearing on a hitherto little-known phase of Early Post-Glacial culture history in Europe. Indeed the assemblage from this site has proved in some respects—especially as regards the antler and bone materials—to be distinct from those of the Danish Maglemosian stations. Furthermore, the occupational debris was found in stratigraphic association with deposits showing that Star Carr is somewhat anterior to the latter. Hence, rather than developing into a typical Maglemose locality in Britain, this site has revealed a stage in the evolution of this interesting culture as a whole about which very little was previously known. This is due to the fact that at the only contemporary site in the Baltic region—the locality of Klosterlund in Central Jutland—no bone and antler implements have been preserved. For this reason, Dr. Clark's work constitutes a fundamental contribution not only to British archaeology, but also to our knowledge of the European Mesolithic as a whole.

Star Carr was a winter camping site some 240 sq. yds. in area situated on the edge of a lake. It is estimated that an area of this size would have accommodated four families, which agrees with ethnographic data. With a detailed study of the animal bones serving as a basis for computing

the total amount of meat eaten on the site—even the calories this would supply have been calculated—it is suggested that the assumed four families could have lived at Star Carr for 6½ years. However, since the site was seasonally occupied, this figure does not represent the actual duration of the settlement, which may possibly have extended over an interval of a century or so. During this period some 45 cm. of deposit accumulated and a certain amount of cultural change seems to have taken place, especially as regards the typology of certain of the bone and antler artifacts. In any case, the empirical data are clearly set forth to provide the basis for discussions relative to population density and rates of cultural change in an Early Mesolithic hunting and gathering context.

This small semi-nomadic community was situated on a rough platform of brushwood, stone, and wads of clay thrown down on the reed-swamp surface bordering the lake. As the occupational debris descended the slope towards the lake, the organic content was recovered in a progressively better state of preservation. No surviving remains of houses were found, although skin tents or reed huts could have existed and completely perished. The palaeobotanical evidence clearly demonstrates that this occupation may be assigned to the very end of the Pre-Boreal stage in the Blytt-Sernander sequence, according to Drs. Godwin and Walker, and this is in good agreement with Dr. Libby's C-14 dating, which gives a figure of 7538 B.C. (or 9488 B.P.) ± 350 years.

The faunal remains, studied by Dr. Fraser and Miss King, show that the occupants of Star Carr hunted red deer, roe deer, elk (*Alces alces* L.), wild ox, and wild pig, in addition to some smaller animals—beaver, hare, hedgehog, badger, wolf, fox, and pine marten—and some birds. There was no trace of the domestic dog. In general the archaeological material demonstrates a fundamental continuity of cultural tradition from Late-Glacial to Early Post-Glacial times in north-western Europe. The exact position of each find was scrupulously recorded by three-dimensional co-ordinates, and all significant types are figured and described in detail in the text. Wooden implements, including handles and paddles, were made of birch and brushwood, while strips of birch-bark were stored in rolls. Various mosses were collected, possibly for bedding. Included in the flint series are a few core axes, a large number of burins, scrapers, awls, and primitive types of microliths. Certain types of burins and awls occur that are not present in later contexts. Of a total of 16,937 recognizable objects of flint, only 1,215 (c. 7.2%) were finished forms and 1,279 (c. 7.5%) were utilized, while the remainder of the series—14,443 pieces (c. 85.3%)—showed no apparent signs of use. In addition to barbed points (nearly all of stag antler), there were some worked stag antler tines, perforated mattock-heads of elk antler, a few bone scrapers and bevelled points of antler, as well as some beads and pendants. Examples of worked frontlets of stag (total: 21) were found, which presumably were either used as head-dresses during ritual dances or were actually worn by hunters for magical purposes during the chase. Thus, notwithstanding its somewhat peripheral location, Star Carr has provided us with a remarkably complete and reliable picture of the material culture traits of the Early Mesolithic peoples who occupied the North European Plain during the period immediately preceding that which is so richly documented by the Maglemosian sites of the Continent.

The author has utilized his evidence in interpreting the economic and social factors bearing on the Star Carr settlers in a manner that is not only legitimate at all times, but also both brilliant and characteristically painstaking. Furthermore, throughout he has clearly indicated the close degree of interaction that took place between these settlers and the contemporary biota—the plant and animal components—on the one hand, and the climatic pattern involved in the Early Post-Glacial context, on the other. However, it is difficult to understand the disproportionate emphasis which Dr. Clark has placed on the so-called 'groove-splinter technique' of working antler. For, in reality, this method, which was first described by Denis Peyrony in 1905 (*Bull. Assoc. Fr. Adv. Sci.*, p. 361) and by the Abbé Breuil and Dr. L. Capitan the following

year, has been recorded by various authorities at a large number of Upper Palaeolithic sites in France, both in the Dordogne and elsewhere, that were occupied during Aurignacian, Upper Périgordian, and Magdalenian times. Certainly it is incorrect to acclaim Alfred Rust, the excavator of Meiendorf, near Hamburg, as being the first archaeologist to publish a detailed account of the method. Indeed in *Salle 1* of the Musée des Antiquités Nationales at Saint Germain-en-Laye there is an entire exhibition case (*Vitrine 29*) devoted to a detailed exhibit of the longitudinal groove and splinter technique of working both deer and reindeer antler with a burin. Furthermore, near the entrance to this room there is a special case containing a Mammoth tusk that has been worked in this manner, together with a burin found nearby that exactly fits into the groove; these specimens were given by Dr. Capitan. Admittedly the demonstration that this method was employed at Star Carr during Early Mesolithic times is of interest from a culture-historical point of view, but one is inclined to the view that it may not be as significant as Dr. Clark has indicated in this monograph. Indeed if one's objective were to cut a longitudinal splinter from either an antler or a long bone, it is difficult to conceive of an alternative method.

This book, which certainly measures up to the Cambridge University Press's well-known standards of technical excellence, is an outstandingly fine example of the inter-disciplinary approach to the solution of an archaeological problem. Under the inspiring and able leadership of Dr. Clark, palaeobotanists, Pleistocene geologists, and vertebrate palaeontologists have succeeded in dating and presenting by far the fullest picture yet reconstructed of the mode of life and material culture of a small community of hunters and gatherers living at the beginning of the Early Post-Glacial Period. Certainly from the factual and methodological, as well as from the theoretical, points of view Star Carr from the time the site was originally discovered until final publication is destined to be acclaimed as a major contribution to the archaeological literature. Furthermore, by publishing his results fully and completely and with such exemplary promptitude the author has placed himself everlastingly in the gratitude of his colleagues. In every respect this book is an outstandingly fine piece of work—one that should be acquired by all archaeological libraries of any standing both in Britain and abroad.

HALLAM L. MOVIOUS, Jr.

Hoëdic. Deuxième station-nécropole du mésolithique côtier Armoricaïn. Par MARTHE and SAINT-JUST PÉQUART. 11 $\frac{1}{2}$ × 8 $\frac{1}{2}$. Pp. xxii + 91 + pls. 10. Antwerp: De Sikkel, 1954.

Thanks to the uncertainties brought about by Hitler and subsequently to the war and its aftermath, we have had to wait twenty years since the appearance of a preliminary report in *L'Anthropologie* for the definitive monograph on the excavation by Madam Péquart and her late husband of the mesolithic settlement with burials on Hoëdic off the coast of Morbihan. The excavations yielded material which reproduces in all essentials that previously recovered from Tévéc some 30 km. to the north-east and fully published by the Péquarts. On the other hand, whereas the Tévéc midden lay close to the surface, that on Hoëdic was sealed by 2 m. of sand, the lower 1.2 m. of which yield flints and sherds of 'dolmenic' type: it is all the more regrettable that this material should have perished during the events of 1940 without being described in detail.

Since the mesolithic industry, including microlithic trapezes and triangles, bone pins and perforated shells, is almost identical with that from Tévéc, the author has confined herself in the main to illustrations, the drawings of flints reaching a high standard. On the other hand, the burials, of which there were nine, involving fourteen individuals, are rightly described at length, since, although agreeing in general with those from Tévéc and including four crowned with stag antlers, each was to some degree unique, and taken together with those from Tévéc add notably to our knowledge of the later mesolithic inhabitants of the Atlantic sea-board. The human skeletal material is summarily described by Professor H. V. Vallois, who dealt in some detail with that from Tévéc.

J. G. D. CLARK

Das Pfahlbauproblem. Von W. U. GUYAN, H. LEVI, W. LUDI, J. SPECK, H. TAUBER, J. TROELS-SMITH, E. VOGT, und M. WELTEN. II 3/5 × 8½. Pp. 334 + 36 pls. + 159 text-figs. Monographien zur Ur- und Frühgeschichte der Schweiz, Bd. XI. Basel: Birkhäuser, 1955.

It is fitting that the centenary of the revelation of the Swiss 'lake-villages' should be marked by a reconsideration of the meaning of what was in fact disclosed by the lowered lake levels of 1853-4 and appropriate that this should be undertaken by a team of archaeologists and natural scientists. The impetus given to later prehistoric studies by this aberration of mid-nineteenth-century weather, although slackened by the dead-weight of museological and morbidly typological studies during the closing decades of the nineteenth and the opening ones of the twentieth century, was never halted and has indeed regained momentum in the present era of settlement-archaeology. So it happens that this handsome volume, far from being a mere pious memorial to a landmark in the history of prehistory, is one of outstanding interest to contemporary prehistorians; indeed, it is one of the most outstanding single contributions made to the later prehistory of temperate Europe since the war.

As indicated by its title the leading topic dealt with is that of the pile-settlements themselves. By one of those ironies which we so often encounter in history this centenary volume finally spells the death of the whole concept of villages built out on piles over lakes, conjured up by Ferdinand Keller and accepted and indeed elaborated by generations of scholars. No doubt it was Oscar Paret's book *Das neue Bild der Vorgeschichte* (1946) that provided the immediate stimulus to research on this, as on other problems (notably that of the egregious Danubian 'pit-dwellings'), but a revision in the light of our knowledge of Neolithic settlements could hardly in any case have been much longer delayed. As Dr. Guyan has generously recognized, Hans Reinerth's excavations on the shore of Lake Constance and in the Federseemoor, had already during the early and middle nineteen-twenties altered the whole climate of thought concerning the lakeside settlements of the Alpine region. Reinerth's excavations, technically ahead of their time, but still largely unpublished in a scientific sense, showed clearly enough that Neolithic peasants built their rectangular houses down on lakeside bogs in quite the same fashion as they did elsewhere on dry land, some of them directly on the bog surface (*Moorbauten*) and some with the floor raised on low piles (*Pfahlbauten*). In his *Die jüngere Steinzeit der Schweiz*, published in 1926, Reinerth was quite explicit that the pile-settlements of Switzerland stood not in water but on shore, a view which he had already expressed in 1921 and published in 1922. Summarizing his work in Waulwiler Moos, where he uncovered structures of both classes, he concluded (p. 90) that 'beide sind nicht im Wasser, sondern am Ufer der Seen oder Flüsse auf Moorboden oder trockenem Grund errichtet'.

Despite this the conception of villages set on platforms on piles over the surface of lakes has died hard and indeed still survives in some circles and Professor Vogt has found it necessary to devote the longest article in the volume (ff. 119-219) to a vigorous refutation, point by point, of the assertions—as he points out they can hardly be termed arguments in the absence of evidence to support them—on which it rested. After a historical survey, he reviews successive aspects of the sites, beginning with the subsoil. In considering sites of the kind which apparently formed the firmest basis of the old dogma—sites, that is, in which the cultural debris overlies lake-marl and which are thickly studded with wooden piles—Vogt makes the point that the surface of the lake-marl immediately underlying the culture-layer at Egolzwil 3 shows signs of terrestrial vegetation and in the opening article of the volume the Danish researcher Troels-Smith specifies that immediately prior to the settlement the site must have been a moist meadow. Examining the actual culture-layer and its contents Vogt goes on to show that this can hardly have been deposited in water, or even in a zone of marginal flooding, but must on the contrary have accumulated on dry land during a period of lowered lake-level. As to the piles themselves he makes the obvious but important point that these should be interpreted, not as if they were all in use at once, but rather as the result of an

accumulation, covering prolonged and often renewed occupation of the site: the forests of piles are to a substantial degree an illusion, the product of a mere circumstance of physical survival. Then again, as Troels-Smith demonstrates, the fact that the piles normally project some distance above the culture-layer does not mean that the artifacts and rubbish contained therein were discarded from floors high aloft on piles, but is merely a measurement of the amount of compression of the deposits through which they were originally driven—among the most telling details are the distortion of the piles (beautifully demonstrated by Guyan at Weier) and the way in which the culture-layer laps up against the piles as though it had been pressed down against them from a higher level. The main mass of piles in fact represent the sub-surface and often the only surviving elements of successions of frame-built houses and their repairs, together possibly with a certain amount of underpinning. Although traces of the above-ground portions of houses are commonly missing—Egolzwil 4 has since provided a brilliant exception (*S.G.U.* 1954/5, taf. II, abb. 2)—it is apparent that these consisted of rectangular structures erected approximately on the same axes, fenced in by palisades (the 'breakwaters' of the lake-village mythology) and linked with drier ground by timber causeways, formerly taken as marking the lines of bridges.

There can indeed remain no doubt that, in Switzerland at least, the settlements marked by piles in existing lakes were originally erected on or immediately above solid land. As Reinert long ago pointed out (1926, 61–62), one of the implications of this is that the prehistoric lake-levels must have undergone marked and apparently fairly rapid changes. In this connexion Dr. Speck is able to show in his account (pp. 275–334) of the Late Bronze Age settlement 'Sumpf' at the head of lake Zug that occupation was interrupted by the deposition of lake-marl (*Seekreide*), which can only be explained in terms of a temporary rise in the level of the lake during Hallstatt B times. No doubt the variations in precipitation responsible for these fluctuations in lake-levels must be considered in relation to the swamping-surfaces known from the bogs of north-western Europe and which have recently been closely studied by Godwin in connexion with the timber trackways of the Somerset Levels.

Although pile-dwellings in the sense of Ferdinand Keller can now be ruled out of account, this is not to deny that the device of building on piles was employed by neolithic man. The Danubians used it to keep their seed grain beyond the reach of ground vermin and it seems to have served in a modified way to raise the floors of Neolithic houses (*Moorbauten*) by the Federsee above the bog-level. The fact remains that, as Vogt emphasizes in this volume, the settlements round the Swiss lakes were essentially terrestrial in character, even if the high-level of the water-table in the subsoil—the factor incidentally which has caused the survival of the piles, building timbers, and a wealth of wooden artifacts—has led to the use of such special devices as the insulation of floors by birch-bark, or the employment either of short piles or gridiron arrangements of recumbent timbers (*Schwellenrost*) to lift them off the immediate surface of the ground. The necessity of such devices might well prompt the query why prehistoric man should have chosen—as he had already done in Mesolithic times—to live on bogs and lake-margins rather than on higher ground. Apart from fishing and, probably more important, ease of transport and movement, it is probable that such localities were chosen because they alone offered adequate space for villages without the necessity of clearance.

The second leading topic dealt with, the nature of the husbandry practised by the Neolithic farmers of the Swiss Alpenvorland, also stems from the pioneer days, notably from the work of Heer and Rüttimeyer on the remains of plants and animals from the early excavations. Here again modern technique, in this case pollen-analysis, has enabled us to gain information of altogether greater precision than our forefathers were able to achieve. What emerges clearly enough from the contributions of Troels-Smith (pp. 11–58) and Max Welten (pp. 61–88) is that the early farmers practised their economy at the expense of the prevailing forest, carving out small patches for cultivation and exploiting more or less extensive areas for fodder, lopping elm for its foliage

and systematically reducing beech, probably by ringing, to reduce shade and encourage the growth of herbs and fodder-bearing trees: both authorities agree that meadows can hardly have existed save on a most exiguous scale. On the other hand, there is some difference of opinion on the question of the stalling of cattle: Troels-Smith thinks they were kept in for at least a season, Welten only for the most severe winter weather. Guyan is inclined to agree with Welten and in this connexion it needs to be emphasized that, not only were the winters rather milder than today, but that the only certain evidence for stalling, in the form of accumulations of dung, relates to goats, which at such sites as Thayngen-Weier, Egolzwil, and Robenhausen were doubtless kept close at hand for milking—the record for cow dung at Robenhausen is an ancient one, on the reliability of which Guyan expressly throws doubt. As regards actual crops and the food obtained from them Guyan has many useful comments to offer, based on his researches at Weier; of special interest is his demonstration that the rounded cakes previously taken as indicating flat bread were in fact residues from the bottoms of pots of the common peasant food of that and much later times, a mess or porridge flavoured by herbs or berries.

Thirdly, there is a brief but highly significant contribution on the radio-carbon dating of the early Cortaillod settlement, Egolzwil 3, by Drs. Hilde Levi and Henrik Tauber of the Copenhagen C 14 Laboratory. The impressive thing about this dating is the way it tallies with the growing number obtained for the earlier Danubian I culture of central and the younger Early Neolithic of northern Europe. What seems to be emerging is a Neolithic phase in Europe lasting much longer and beginning much earlier than it had recently been the fashion to maintain—but more in accord with the antiquity of farming established for parts of western Asia and the Nile Valley.

The three points here touched upon by no means exhaust the interest of this volume, which it is important to note ranges up to the end of the Bronze Age, as witness Speck's contribution on the Sumpf settlement and Lüdi's on the vegetation of the Alpenvorland from the beginning to the end of the period. In particular there is a wealth of information about structural details and the technique of working wood at different periods. Special praise should also be given to the abundance and high quality of the illustrations, which help to make this a necessity for all libraries concerned with prehistoric archaeology.

J. G. D. CLARK

Die Heuneburg an der oberen Donau: ein frühkeltischer Fürstensitz. Von KURT BITTEL und ADOLF RIETH. 9 × 6. Pp. 54 + 18 pls. + 6 plans. Stuttgart-Köln: W. Kohlhammer, 1951. DM.9.

The excavations recorded in this small but significant first report have been continued, since 1950 when they were begun, every year, and are planned again for 1956. After Professor Bittel left Tübingen for Turkey, an arrangement was made whereby his successor W. Kimmig, together with Professor W. Dehn of Marburg, as well as Dr. Rieth, continued their direction; the discoveries have proved intensely interesting, and the sequels to this report will be found in *Germania*, xxx (1952), 325–9, and xxxii (1954), 22–59. The Heuneburg, at the Talhof near Hundersingen in southern Württemberg, looks south over the Danube, and is a small but strong hill-fort on a prominent spur directly above the river. In the woods behind it are the great Hallstatt barrows of Hundersingen, where the older excavations have now been resumed as part of the Heuneburg campaign. For the Hallstatt culture that they represent clearly includes that of the hill-fort; in fact, they seem essentially the tombs of the chieftain families whose leaders presently built and held it as their stronghold. The four periods recognized by Bittel have since

had to be supplemented and slightly rearranged; their numbering proceeds backwards from the uppermost to the earliest and lowest, and the scheme in the 1954 Report is as follows:

- VI (Urnfield period). Older than the known fort-works.
- V (mainly Bittel's 4). Early Hallstatt D: the hill laboriously built up into a flat-topped steep-sided fortress, with a wall of timber construction.
- IV (Bittel's 3). Continuing from V: the perimeter partially fortified by a wall of clay bricks, on a stone foundation, with rectangular projecting bastions. On the fourth side, facing the neck of the spur, a wall of box-like timber construction appears instead, and looks down on the colossal main ditch.
- III (Bittel's 2a, NW. side). On the destruction of the works of IV by fire, a fresh timber and earthen wall built in their stead, still within Hallstatt D.
- II and I (Bittel's remaining 2a, 2b, and 1). On the burning of this wall III, another timber and earth wall, with three rows of large distinctive post-holes. This is wall II, and the same phase has now (1954) been seen to embrace Bittel's period 1; the posts were braced by beams into a doubled box construction. Late Hallstatt D, chronologically no older than Early La Tène.

The finds are most remarkable. In pottery, the native Hallstatt tradition runs its course, but is diversified by outside influences. At the very start of Hallstatt D, the culture's older sort of pot-colouring recedes abruptly before smooth ware with painted designs in red (sometimes black, too) on white (plates xvii-xviii here), and the production by the end of pedestal-vases in virtually La Tène style is only the latest of the signs that the chief foreign influences were Greek. This, surely, must explain the totally un-Hallstatt brick wall and bastions of period IV. Not only are there Greek amphora sherds, but a small but precious number of Greek black-figure vase sherds which have been bracketed 520-470 B.C., and which thus take the sequence of periods III-II/I well down into the 5th century. Evidently the first La Tène cultural impulse will have already then begun, in those other parts of South Germany where its signs have been disclosed; all the same, the whole Heuneburg phenomenon must tend to set Hallstatt D absolutely somewhat later than has often been believed. The relative chronology propounded by H. Zürn (*Germania*, xxvi, 116; xxvii, 20; xxx, 38) is pleasingly confirmed, and students of fibulas will find both Bittel's and the subsequent reports enjoyable; his choicest find is a lovely little gold spoon, with perforated bowl (pl. ix). Altogether these excavations, and the work in progress on the whole Hallstatt period of South Germany, must draw our eager attention. Less spectacular than the finds of Mont Lassois and the Treasure of Vix in France, they yet show that the Greek trade inland from Massalia in this period reached beyond Burgundy to Swabia, where Celtic chiefs like those of the Heuneburg could enrich themselves from it, and drink the southern wine it brought. The fort's repeated destructions, moreover, remind us what barbaric violence could smoulder in such communities; and what more the site and the near-by barrows have to tell, we shall wait with expectancy to learn.

Meanwhile, where so many are earning congratulation, let some of it go retrospectively to Bittel, who with Rieth originally picked the site. Their acuteness of judgement, and their first season's digging which the book here primarily reviewed records, have set a big ball rolling.

C. F. C. HAWKES

Actes du Congrès Panafricain de Préhistoire: II^e Session, Alger, 1952. 10½ × 8. Pp. 802. Paris: Arts et Métiers Graphiques, 1955. n.p.

Dr. L. S. B. Leakey, the Director of the Coryndon Museum, Nairobi, whose idea it was that a congress should be held at intervals in different parts of Africa to discuss the prehistoric problems

of that continent and to foster and plan researches therein, is to be congratulated on the successful conventions that have resulted from his initiative. For the two meetings that have followed the inauguration in Kenya in 1947 have been marked by increasingly large and more representative attendances. Those who were unable to be present at the Second Panafrican Congress on Prehistory at Algiers will certainly find in the lavish volume of its proceedings some consolation for their absence from the North African scene in the autumn of 1952. The variety of the contents is amazing, although the pages can but hint at the inestimable wealth of prehistoric material in the boundless fields of inquiry that Africa affords. That it has been possible, however, to incorporate within its covers so much on investigations conducted between the first and second meetings is due to the liberality of the government authorities in French North Africa and the University of Algiers. Both have wisely encouraged all forms of serious, methodical, archaeological investigation.

The first of the three parts, into which the *Actes* are divided, is concerned with the business of the meeting and the structure of the Congress as a regularly constituted body for African prehistoric studies. Its references to the many excursions made in Algeria, its eastern and western borderlands, as well as in Morocco, are useful as they include clear descriptions of regional Pleistocene and earlier geology, of the ground and the sites visited.

The second part is important for the student and it will appeal most to the general reader, since it fully records public addresses on the main outlines of prehistory in the southern Mediterranean and northern Atlantic fringes. These contributions show how vast was the period of time represented by Stone Age remains in these territories considered. Alone the diversity of artifacts found on the surface by the members of the congress during excursions emphasizes this. A notable contribution is Abbé H. Breuil's detailed survey, analysis and sketches of the spirited and complex rock-paintings of late Upper Palaeolithic and early Neolithic execution, representing naked and clothed human beings and a varied fauna, in the mountainous Touareg country. Monsieur H. Lhote, of Paris, adds his comments on the affinities of this art with that of ancient Egypt and other parts of Africa. His observations are the more valuable and interesting in that he is here also the author of other papers on rock-paintings and engravings, and on polished stone human statuettes.

More than half of this volume goes to make up the third part. Devoted to the African continent generally, it is subdivided into sections on geology, palaeontology, climate, and prehistoric archaeology. Papers on the first three, of course, bear on early man's environment, habitat, and diffusion. Several on the Pleistocene formations and deposits of Africa present data for study as well as comparisons and possible correlations with the memorials of that epoch in other continents where different conditions obtained. Particularly interesting essays appear on the celebrated Quaternary raised beaches and associated archaeological relic-beds of the north African Mediterranean coast. They cause one to ask when comparable features nearer home will receive as keen attention. Not unexpectedly, several communications relate to the anthropoid and lower animal remains which, before and during (and, it may be added, after) the congress have provided much matter for discussion and speculation.

Illustrations of topographical and geological features, of sites and antiquities, also maps, accompany most of the articles. Regrettably, however, the standard is not uniformly high. Even where drawings, on the one hand, are very good and photographs brilliant, the occasional absence of a scale, or the presence of preventable or easily removable shadows, and supports for specimens that could have been masked, diminish scientific value or mar the general effect. Tables, on the other hand, are commendably clear. What faults there are may well be overlooked, as the contributions are the products not only of established authorities, but also of properly qualified pioneers breaking new ground. To members of both categories and to all those responsible for this notable publication congratulations and thanks are offered.

A. D. LACAILLE

Steinpackungsgräber von Köthen: ein Beitrag zur Kultur der Bronzezeit Mitteleuropas. Von W. A. VON BRUNN. 11 $\frac{1}{2}$ × 8 $\frac{1}{2}$. Pp. 79 + pls. 19 + maps 4 + figs. 10. Deutsche Akademie der Wissenschaften zu Berlin, 1954. DM. 18.

Two Late Bronze Age graves were found in 1927 at Köthen, midway between Magdeburg and Halle near the confluence of the Saale and Elbe. The largest contained two cremations, with fifteen pots, spiral beads of gold, and various bronzes. Both graves are related by Dr. von Brunn to twenty-two other assemblages to form a Lower Saale group (*Saalemundungsgruppe*), which includes inhumation and cremation graves of various kinds, some of which contained spear-ferrules like those from Köthen.

The pottery of the group is predominantly of Lausitz character. The early bossed ware is lacking, and the best resemblances lie in the Middle Lausitz wares of Saxony, particularly in the sharply angled, channelled, and faceted ware (see Grünberg, *Grabfunde der Bronzezeit in Gau Sachsen*, 1943). Other cultural influences are scanty, although the anomalous pottery find from Dessau-Kühnau, which has obvious South German and Swiss parallels of Hallstatt A date, is included in the group. Influence from the Knoviz culture is scarcely ascertainable; it is more definite in the so-called Unstrut group of burials west of the Saale. Two jugs from Köthen stand apart; some from Hercynian and Sudeto-Danubian Tumuli are similar in form, but Hötting culture parallels seem the best.

The knife from Leitzkau-Göbel is compared to others from the hoards of Jenšovice and Kunitz, to be assigned to late Hallstatt A. Most of the bronzes can be matched in the late Tumuli and early Urnfields of Bohemia and South Germany. The group, however, lies at the fringe of distribution of northern bronzes, and the fibula and anklets from Köthen belong to Montelius IV.

Dr. von Brunn is rightly cautious of applying the Montelius system to a region where its types have not developed. However, a few of the early graves (Biendorf, Nienburg, and Zörbig) may reasonably be dated to period III and an early phase of Hallstatt A; the remainder, which include the graves with swords (*Griffzungenschwerter*) of Köthen and Latdorf, to period IV and a late phase of Hallstatt A.

HUMPHREY CASE

The Bronze Cauldron from Brå, Early Celtic Influences in Denmark. By OLE KLINDT-JENSEN. 12 $\frac{1}{2}$ × 8 $\frac{1}{2}$. Pp. 97 + pls. 12. Jutland Archaeological Society Publications, vol. 3. Aarhus University Press, 1953.

In 1952 an immense bronze cauldron, with an iron socketed axe, was found in a pit, covered by boulders and earth, which formed a mound, at Brå south of Horsens, in Jutland. The cauldron had been broken up before the (ritual?) deposit was made and was not complete. Both cauldron and axe are regarded as imports, and no native objects were associated with them. The pit contained no Roman remains.

The cauldron as restored in the National Museum is a bowl greater than a hemisphere of thin bronze, without a foot-ring, with, of course, a 'tumble-home' to its heavy moulded iron rim, bronze-covered. There were three ring-handles of circular section also of bronze and iron, each moving in a moulded bronze loop, ornamented with celtic scrolls and with a stylized owl-head facing inwards. Flanking each ring, on the lower edge of the bronze rim of the cauldron was a pair of cast bronze ox-heads, each fastened with an iron rivet. The rings, when not in use, rested on these heads.

Dr. Klindt-Jensen, having explained and fully justified the reconstruction, considers the source of the piece and the parallels to its ornament—the outward- and inward-looking creatures. He is led to the bronze vessels from Etruscan graves in Vetulonia and their outward-facing griffons, intended to inspire horror or fear. Here the inward attachments are human-headed with

bird's wings and tail— notions derived from the Near East. Some vessels of this class have outward-facing bulls-heads, but it is clear that no known piece from Etruria is quite like Brā, and the author concludes that it is a Celtic piece made probably in the Rhineland.

This is a reasonable (tentative) conclusion; the two pairs of creatures have not, in the reviewer's opinion, the unity that the classic pieces of its group provide, coming as they surely must from two workshops. The owls heads are elaborate, stylized conventions illustrating savage fierceness: a 'baleful stare' is the excellent English phrase used. The bulls-heads, on the other hand, show the placid friendly outlook of the farmyard beast: a Romanizing style, well illustrated in Britain, as Professor Hawkes and others have demonstrated.

Following the description and comment is a section on the 'ornamentation in the light of Celtic art', in which much use is made of Dr. Jacobsthal's *Corpus*, and of a recent discovery of a lovely bronze spouted flask with relief ornament at Malomeřice cemetery near Brno in Moravia. Dr. Jensen places the cauldron in Jacobsthal's later 'Plastic Style', about 250 B.C.

Thereafter the early cultural connexions of the north with the Celts are discussed: how and why did the cauldron get to Brā? what parallels are there to it in the north? and what works of Celtic art generally? These and other queries are presented in a valuable commentary with which the book ends. It should be on the shelves of all students of early Celtic art.

CYRIL FOX

III Sprawozdanie z prac wykopaliskowych w grodzie kultury łuszyckiej w Biskupinie w powiecie żnińskim za lata 1938-1939 i 1946-1948. Praca zbiorowa pod redakcją JÓZEFA KOSTRZEWSKIEGO. Comptes-rendu des fouilles de Biskupin en 1938-1939 et 1946-1948. 12 × 8½. Pp. 373. Poznań, 1950. With summaries in French.

The fortified Lusatian village of Biskupin in Western Poland, since its discovery in 1934, was excavated every year except the war period 1940-5. The first Report on these excavations was published in 1936, the second in 1938, and this is the third one, for the periods 1938-9 and 1946-8, all of which appeared under the editorship of Professor J. Kostrzewski. It contains nineteen articles by fourteen authors who deal with the method of excavation, morphology and geology of the site, faunal and floral relics; one article discusses the technique of timber constructions and exposes a number of feasible reconstructions of these. The remaining descriptive articles are concerned with the many types of objects, implements, weapons, ornaments, &c., found in the remains of the village, and are accompanied by several plans which show the distribution of these objects within the hitherto excavated part of the village. The present Report does not include the study of pottery which will be discussed in the next Report. All these articles deal almost exclusively with the remains of the Early Iron Age, leaving out those of later periods, in particular those of the early Polish earthwork of the tenth and eleventh centuries A.D., which was built on the same site. The Report is profusely illustrated by 322 illustrations, 20 plans, and 6 tables.

The Lusatian village of Biskupin was built in about 550 B.C. It succumbed to a conflagration but was rebuilt on the old plan. It was in existence for about eighty years and was abandoned because of some unknown catastrophe. It covered an area of approximately 20,000 sq. m., about half of which has been excavated so far.

The Report under review is a very valuable contribution to the study of the Lusatian culture and of the standard of living of the agricultural population of Central Europe in the Early Iron Age in general. It is a great pity that such an important publication appeared in a very pitiable form, printed on an inadequate sort of paper; as a result a large number of the photographs (forming seventy-four figures in the text and six plates) are very poor or even illegible.

T. ŚULIMIRSKI

Les Roches peintes du Tassili-n-Ajjer. Par L'ABBÉ HENRI BREUIL. 10½ × 8½. Pp. 163. Paris: Arts et Metiers Graphiques, 1954.

Ever since Acheulean times the Sahara Desert appears to have been a very real barrier to movements of peoples, and the evolutions of prehistoric cultures north and south of it have consequently been entirely different. Little or no culture contact seems to have been possible. From east to west, however, along the flanks of the sandy waste more traffic seems to have occurred from time to time; and during periods in the past, when the climate was damper, fringe areas of the great desert became more or less habitable. These fringe areas in the north and west have yielded the remains of neolithic and early metal age cultures, and not a few of the rock-shelter sites which have been studied have paintings and engravings on their walls. Many of these drawings are of no great antiquity but some at any rate would seem to date back as early as Neolithic times. Our knowledge of them is increasing rapidly. *Les Roches peintes du Tassili-n-Ajjer* is by the Abbé Breuil with the assistance of M. Henri Lhote. It deals with important discoveries of paintings and engravings on rock surfaces made by Captain (now Lieutenant-Colonel) Brenans while commanding at the Sahara fort of Djanet.

Some 940 miles south-east of Algiers there is a mountainous country called Tassili-n-Ajjer which encircles on its north-east the mountain massif of Ahaggar, between the 24th and 27th parallels of latitude and the 8th and 11th lines of longitude. This mountainous region rises to a height of 2,335 metres. Farther to the south-east is the massif of Tibesti, where rock-shelter art also occurs, and to the north-east of this latter is the minor massif of Ouénat where rock-shelter paintings have long been known. The present volume opens with a description of the country and the position of the various sites by Monsieur Lhote. Then follows a detailed analysis of the drawings themselves by the Abbé Breuil. Many different kinds of animals are figured, including elephant, rhinoceros, giraffe, buffalo, wild sheep, antelope, etc. Some domestic animals occur including the dog. Many human figures variously equipped or clothed can be seen: the Abbé discusses their affinities. Monsieur Lhote then once again takes up the story and supplies comparisons between the art of Tassili-n-Ajjer and other decorated sites known in the western regions of North Africa. Dates are also considered, and an early Neolithic age would seem to be the general conclusion for the earliest examples of this art group. M. Lhote also supplies an excellent inventory and bibliography of north equatorial African rock paintings, apart from which the most important section in the book is that devoted to the Captain's drawings. Here are the documents themselves for anyone to study and compare with illustrations of other art groups already published. The work as a whole is an important addition to our knowledge of North African rock art and Captain Brenans is to be congratulated on his discoveries and the Abbé Breuil and Monsieur Lhote on the able way they have presented them to the reader.

MILES BURKITT

Lascaux and Carnac. By GLYN DANIEL. 8½ × 5½. Pp. 127. London: Lutterworth Press, 1955. 15s.

I have known it come as a surprise to some people to learn that Glyn Daniel is a prehistorian *de metier* and in certain later branches of the subject at the very top of his profession. They had always thought of him as a mere B.B.C. 'wallah'. Personally I think that the public should be very grateful to Dr. Daniel in that he has put his profound and accurate knowledge of the subject at their disposal; there are all too many 'scissors and paste' persons ready to 'instruct' the public in any branch of knowledge which happens to be popular—and prehistory at the moment is popular. It has resulted, then, from Glyn Daniel's popularizations with his colleagues and the B.B.C. that a large number of folk have been wanting to visit the famous sites on the Continent,

and this book is meant to help them. For the most part they are non-specialists and are also interested in the later history of the country they will be visiting, as well as the food and drink they will consume. *Une bonne table française* comes as a revelation to an Englishman who has never tasted French meals before and has always been used to English cooking. Dr. Daniel understands all this!

Two areas in France are dealt with—those around Les Eyzies in the Dordogne and Carnac in Brittany. If a word of criticism may be allowed, the scientific descriptions are perhaps too slight. Any accurate observer can separate various styles in the art and determine superpositions on the cave walls. Not much knowledge enables him further to play the jig-saw game of assigning styles to the various culture levels. Even if Dr. Daniel did not want to go deeply into this matter he might perhaps have enlarged on its importance and furnished a short bibliography for those who would like to probe further into the subject. Two trifling errors may perhaps be corrected. P. 59: there was no Magdalenian in the original fissure at Pair-Non-Pair, but it does occur near by at the Grotte des Fées. P. 66: at one time, some forty years ago, I lived for many months at Castel d'Andorte with Dr. Lalanne and the Laussel Venus; but I was always told that she had been found in the late Aurignacian (Gravettian) level—not as Dr. Daniel suggests cut off the wall by the doctor—together with some eight or nine other less spectacular sculptured blocks, though probably formerly they all had formed part of a sculptured frieze on the back wall of the rock shelter. However, unfortunately Laussel was mainly dug by Peyrille who was a bit of a rascal—it was he who sold one of the sculptured blocks to the German—and although the site was visited weekly by Dr. Lalanne there are many details in the stratigraphy that are now lost. Among the Morbihan sites Dr. Daniel is indeed at home; one gets the impression that, if history was suddenly wound back and prehistoric rites started to take place at Carnac and Gavrilis, he would feel quite at his ease and ready to take an appropriate part. The book is to be strongly recommended to anyone taking up the subject of prehistoric archaeology as a hobby, and who wishes to see something of the painted and engraved caves of the Dordogne and the awe-inspiring megalithic monuments in Brittany.

MILES BURKITT

The Meare Lake Village. A full description of the excavations and the relics from the eastern half of the west village, 1910-1933. By HAROLD ST. GEORGE GRAY, O.B.E., M.A., F.S.A., F.M.A., and ARTHUR BULLEID, L.R.C.P., F.S.A. (deceased). Vol. ii. 12½ × 9¾. Pp. xi + 175. Privately printed at Taunton Castle, 1953. 90s.

This second part of the report on the Western Lake Village at Meare (the pagination is continuous with that of the first part published in 1948) contains the description of the excavated structures and an illustrated catalogue of the finds of metal, shale, worked wood, and fired clay other than pottery.

By no means the least valuable aspect of this account of the excavation, carried out with painstaking devotion for more than twenty years, is the way in which it illustrates the change which has taken place in what the reader expects from an excavation report. Today, the excavator is required by the accepted responsibilities of his calling not merely to describe the structures and objects which he uncovers, but also to interpret them in terms of technology and temporal succession, and to draw from them such inferences as the material may permit concerning the social and economic status of the community which they represent. The entire absence here of any interpretative comment upon a site of exceptional structural complexity, and the sense of frustration which it induces in the reader, underlines most forcibly the modern view that the responsibilities of the excavator are not limited to the mere presentation of facts.

It is clear from the plans and the summary descriptions of the forty structures examined wholly

or in part that a wide range of building-types was represented, including not only rectangular as well as circular timber foundations, but also other structures in which the clay floors, often superimposed, seem to have had no outer wall at all. It is legitimate to suppose that these structural variations represent differences of function and possibly differences of date. But although the few sections published (all of a diagrammatic kind, whose position is not indicated on the plans) show that in at least some cases the chronological relationship of adjacent buildings was observable, there is no general treatment of the possible sequence of building, nor does the evidence presented allow the reader to reconstruct more than a fraction of such a sequence for himself.

Since the whole burden of interpretation is thrown upon the reader, it must be more readily be confessed that he is ill served here by the manner in which the factual evidence is presented. The plan, at a scale of 1:60, is divided into twelve parts, without overlaps, so that of the twenty-six buildings wholly exposed, or nearly so, the plans of no less than sixteen are cut by the sheet lines, and can be appreciated as a whole only if the reader makes his own tracings from two or more separate sheets. This tiresome necessity might have been avoided without additional cost by a quite practicable reduction in scale, and by the omission of most of the reference-numbers of individual finds, which in many places tend to obscure the structural details. Their inclusion is difficult to justify, since the stratigraphical position of most of the finds is not recorded. In a typical building (XXIV), for instance, only four out of eighteen significant objects are related to one or another of the four superimposed floors.

The large quantity of finds described and illustrated comprise perhaps the most valuable section of the report, and form, together with the comparable material from Glastonbury, the leading corpus of material for the student of Iron Age technology, even if their potentialities for the internal relative chronology of the site must remain largely unknown. Here too, however, it must be confessed that their presentation leaves much to be desired, for though a list of find-numbers is appended to the description of each building, the finds themselves are catalogued by type, without consecutive numbering, so that to identify any given number may involve searching no less than twenty-one sections of the catalogue. It may thus take the reader more than an hour to compile a list of the finds from a single building.

It is a melancholy and disagreeable task to make such strictures upon a report which, whatever its shortcomings, will always stand as a monument of patient and devoted research in the service of British archaeology. The work here described ended in 1933. Even if more recent developments, both in the techniques and attitudes of excavators and in the presentation of their results, tend to throw into relief the inadequacies of earlier achievements, it must not be forgotten that those developments themselves have grown out of the long and honourable tradition of research here represented.

R. J. C. ATKINSON

Tofting: eine vorgeschichtliche Werft an der Eidermündung. Von ALBERT BANTELMANN. Offa-Bücher, n.f. 12. 12 x 8½. Pp. 134 + 43 pls. Neumünster: Karl Wacholtz, 1955. n.p.

Tofting is a marsh settlement on the estuary of the Eider in North Friesland (Land Schleswig-Holstein). Trial excavations, uncovering a comparatively small part of the artificial mound, revealed an occupation starting in the 2nd century A.D. In the earlier strata, covering the period down to the 5th century, the remains of houses and other organic material were well preserved by the thick layers of dung. The pottery shows a continuous occupation down to modern times. The mound covers an area of 7½ acres; the modern surface is some 12 ft. above the original level of the marsh, which is here 5 ft. above modern sea-level. The excavations were undertaken to investigate the background of these marsh settlements and their relation to sea-level. The report provides much useful information on this subject, including detailed analyses of the botanical

material and the diatoms. There is also a full account of the animal remains and a comparison with the relevant material from similar sites. The excavation was carried out with meticulous care and the conclusions are well argued. The pottery of the early period down to 1000 is copiously illustrated.

No review can do justice to all the features discussed in this report. We therefore choose to discuss one particular matter. North Friesland is among the areas from which our Anglo-Saxon ancestors crossed the North Sea to settle in England. The investigation of Tofting, therefore, has a very considerable interest for the archaeology of this country. The authors point out that their programme did not allow for the extensive recovery of house plans. But the trial trenches, with the areas opened out alongside of them, are enough to establish the type of dwelling in use from the 2nd to the 5th century. It was an aisled longhouse with two rows of substantial posts carrying the roof. The outer walls were of wattlework, against the base of which was piled an external mound of turves or dung. A row of posts set within this mound must have supported the outer end of the roof. The houses were of considerable length; one end was used as dwelling quarters, the other as a stall for animals. As the discussion shows, this type of house is common and normal in Friesland at this period. Examples can be quoted as far west as Ezinga in the Dutch province of Groningen; it is also widespread in Jutland and in Scandinavia. The inhabitants of Tofting were farmers. Cattle reared on the flat meadows of the then undiked marshlands were their main support, but they also practised agriculture. They used an extensive series of native pottery and occasionally obtained a provincial Roman import. These are not aristocratic nobles, dwelling in halls like the Hrothgar of Beowulf, but their houses have nothing in common with the squalid huts of Sutton Courtenay. The contrast must reflect some social or functional distinction; it serves as a warning that Sutton Courtenay can no longer be regarded as a typical Anglo-Saxon village (see also *Germania*, Jahrgang 32, 1954, 208-13). C. A. R. RADFORD

Oreficerie Langobarde a Parma. Por GIORGIO MONACO. 10 $\frac{3}{4}$ × 7 $\frac{1}{2}$. Pp. 42 + tav. 20. Museo Nazionale di Antichità, Parma, 1955.

Parma is situated towards the southern edge of the plain of Lombardy in the province of Emilia. In 1950 a richly furnished Germanic grave of the seventh century A.D. was found in the central part of the town. Parts of a young woman's skeleton, including the skull, were recovered and the jewellery also indicated that this was a woman's burial. It was disturbed by workmen, and no detailed record of its layout could be obtained, but the excavation was completed by the author, who is the Curator of the Parma Museum of Antiquities. The Germanic grave was laid in a gabled cist constructed of large tiles in the manner characteristic of ordinary graves of the Roman era in the area. The contents were typical of rich Lombard graves of the period—a 'Coptic' bowl, with solid ring foot and no special features; a magnificent gold disc-brooch, 2 $\frac{3}{8}$ in. in diameter, encrusted with garnets, the finest of its kind yet found in Italy; the typical gold-foil cross (plain); two groups of beads; part of a gilt-bronze buckle-plate; gold wire; two gold finger-rings, one with a bezel (empty) and one a broad plain hoop decorated with punch-marks; and finally, five remarkable small stamped plates of gold-foil, four in the form of two birds juxtaposed back to back, and the other a swastika with Style II bird's-head finials; these were evidently sewn on to cloth, or even perhaps over buttons. The Museum of Parma is to be congratulated on its useful account of this important find. The publication is in general admirable, though specialists could wish for rather more technical detail. The photographic record of the disc-brooch, with enlarged details and colour plate, is particularly good. This is the outstanding piece, and it has a curiously English look in many respects and differs in important details from the general run of cloisonné disc-brooches of the area. The beads of the necklace (not

accurately rendered in colour) have to this reviewer's knowledge no parallels in contemporary archaeology—were it not that Dr. Monaco found them personally, one's instinct would be to think they had been planted. A good deal of comparative material is illustrated by way of background for the general reader and there is a useful introduction by Professor G. P. Bognetti on Lombard archaeology and the interest of the new discovery in its historical setting.

R. L. S. BRUCE-MITFORD

Germanic Art during the First Millennium A.D. By WILHELM HOLMQVIST. $9\frac{1}{2} \times 6\frac{1}{2}$. Pp. 90 + 62 pls. Stockholm: Almqvist & Wiksells Boktryckeri, 1955. Kr. 25.

This book deals with pagan Germanic art and the long survival of paganism in Scandinavia causes that region to dominate the theme. This has enabled the author to introduce 'some of the earlier medieval Scandinavian material with an English commentary to a wider international public'. The series of illustrations also includes a few specimens of Anglo-Saxon work and examples from Frankish and other southern areas. The text is comparatively slight and the argument in places difficult to follow. The author believes that Germanic art was influenced mainly from the late Roman world and, in a later phase, from English or 'Anglo-Celtic' sources. Not all his conclusions will command general assent. As an example we may cite his views on the relation between Scandinavian and Anglo-Saxon acanthus derivatives in the eleventh century; these are admitted to be contrary to the view of 'English experts'.

C. A. R. RADFORD

L'Art gaulois dans les médailles. Par LANCELOT LENGYEL. $14 \times 10\frac{1}{2}$. Pp. 59 + pl. 48. Montrouge-Seine: Éditions Corvina, 1954. Fr. 6,870.

It is important to realize that this beautifully produced work is an appreciation of Celtic art and thought as expressed in the coinage of Gaul, with a cursory glance at Britain and the Eastern Celts. It makes no claim to be a fresh investigation into the problems of chronology and ethnic distribution with which the subject of Celtic coinage still bristles, and the author is content to rely numismatically to a great extent upon the classics of Blanchet and de la Tour. In claiming that his book is 'a new chapter in western art' (p. 25) he is only stating the truth, as this is the first book to deal adequately, if at all, with the Celtic conception of art and the religious symbolism in this coinage. This truer understanding of Celtic expression which owes only its original inspiration to classical realism will surely lead to a better historical interpretation of the coins. M. Lengyel postulates that the Celtic approach to art was more spiritual and more intellectual than the Greek. There was a constant tendency to abstraction, and man no longer occupied the centre of the stage. He was merged, if the author's interpretation is correct, in the tribe, often represented by a human-headed horse, while almost every shape, every line and every dot had its symbolic meaning—whether of the sun or of the moon, of life or of death and rebirth. We may be surprised to find the Druids playing a considerable part in drawing these esoteric designs, and we may not agree with all the author's explanations, but there can be little doubt that this imaginative and well-documented work is a true landmark in this field of numismatics.

Forty-eight loose plates are enclosed with the paper-bound text in a strong card container. As well as a map of Gaul, showing the tribes and Greek towns (with a few misspellings), all the coins described are illustrated by excellent and greatly enlarged photographs. The natural size is usually, but not always, shown as well, and sometimes it proves not to be exactly the natural size after all. There is no standard of enlargement and obverses and reverses are

illustrated or not illustrated, together or separately, according to their artistic importance. We must look at the list for correlation.

M. Lengyel has clearly made a wide and deep study of Celtic mythology, and has made full use of both classical and later authorities. Even Irish legends assist him to interpret some of the bizarre designs. It may be that modern numismatic writers have been less consulted. Only Evans and Mack are cited for the British series, and it was Allen, not Evans, who established that the British 'tin' coinage was of early date.

Chronology is, in fact, one of the main stumbling-blocks, and we do not find in the present work very much to remove it. There is the statement (p. 41) that coins seem to have been struck in Gaul since the fifth century B.C. and a few other much later dates for certain issues are suggested but for the most part typology provides the only clue to dating. Is it not possible that tribes of Hallstatt culture in east central Gaul made cast coins before the technique of striking had been introduced by later Celtic tribes from the east?

M. Lengyel has seen fit to re-attribute to the Ambiani (318-21) certain coins formerly allotted to the Bellovaci. Undoubtedly he is right, but should he not have gone further? Did the Morini really strike a stater with a triple-tailed horse (355)? And what about the little gold coin (206, 7) on plate XVIII? The facing head of Arethusa seems to remove it to the eastern Mediterranean and if we compare it with the Galatian coin figured by Forrer (pl. XLVIII, 423) we can see how the helmeted head of Mars has been transformed into a boar, an eye, and two 'dolphins'. The dynamic Celtic pattern (p. 4) displaces the human form.

One is inclined after reading this book to agree with most of the author's interpretation of symbols. A crescentic head is the moon, which may also be represented by two dots. The boar is an attribute of the moon, while a cock heralds the sun, which may be signified by a large number of signs, or simply by three dots (p. 13). At times one follows M. Lengyel with less confidence. Is there any certainty that a sinuous curve represents resurrection? And when the Britons first put a dot in a circle attached to an umbilical cord can we be sure that they were drawing a symbol of fertility? The design of the cast bronze coins from Hengistbury Head (p. 44), a forked line between two groups of seven dots, is said to indicate life and death. It is like reading fortunes in tea-cups. On the other hand it is surely as plausible to call the confused lines on the east Gallic staters of plate XXXVIII a magnetic field symbolizing divinity, as it is to say that these coins were struck from defaced dies. More specifically one must question the sun-ship which M. Lengyel sees in the coins numbered 436-8 and 550 and, to mention only one other coin (300), the object which accompanies the man and the anthropoid-handled dagger can as well be an axe-head of a known Caucasian type, as a snake. Perhaps interpretation of Celtic design is in the eye of the interpreter.

The text is remarkably free from typographical mistakes, and apart from the spelling of Alföldi (p. 49) and Tasciovanus (p. 56) the only consequential slip noticed is that the Evans reference to coin 369 on the same page should be pl. XVII, 1. In the plate of British coins (xxxv) an anonymous silver coin (366) is ascribed to Antedrigus and a stater of the Veliocasses (370) has appeared on the wrong side of the Channel.

These last remarks are but minor criticisms of a work which, in my opinion, will be very widely accepted as the only important contribution to the subject of Gallic coinage since those classics upon which the author has perhaps placed a little too much reliance.

H. DE S. SHORTT

The Ordnance Survey Map of Roman Britain, 3rd ed., 1956, 4to, pp. 1-43, figs. 1-5 and folding map. The Ordnance Survey, Chessington, Surrey. Prices, text and folding map, 7s. 6d. map, unfolded, 3s. 3d.

Praise for this new map, based upon the original work of Dr. O. G. S. Crawford, is due to

the Director-General of the Ordnance Survey, Mr. C. W. Phillips his Archaeology Officer, the Assistant Archaeology Officer Mr. A. L. F. Rivet, and the cartographers. It may be said with truth that the new edition is as notable a contribution to learning as the first edition, and the introductory essay, which describes the numerous changes in detail, is a thoughtful summary of present knowledge about the various sections. There is a chronological table, two valuable maps reproducing Ptolemy's British sheets and the Antonine Itinerary respectively, three detailed topographical maps, an excellent table of Roman geographical names, and a grid reference to the present National Grid for every major symbol.

The folding map, which is also obtainable unfolded for display, is clear, and extends, with the aid of insets, from the Scillies to the Shetlands. This extended area has a new significance: for an attempt has been made by using small dots, to mark every authenticated small find, or groups of such. An estimated density of Romanization is now available for every corner of the province and its outlands. Since the significance of each dot is recorded in the Archaeological Division, this stands for a very large archive. The new convention is of particular interest when applied to such outlands as Cornwall, where the concentration of finds in the tin-producing areas, particularly in the heel and toe, is remarkable, and might prompt the postulate that the Tintagel milestones, in their empty area, were linked with a military road and coastal defence of the fourth century. In Wales the cluster of finds in the Glamorganshire sea-plain and the scatter in Pembrokeshire are a challenge, inviting the discovery of further villas in the former and the elucidation of structures like Cwmbwyn (and two new examples) in the latter. In Lancashire also the coastal plain between Mersey and Ribble has a rather larger quota of dots than might have been expected. Scotland, again, is especially interesting for the clear indication which the dots afford of the philo-Roman communities of the Votadini and Dumnonii, contrasted with the dearth of evidence for Romanization elsewhere. In the foregoing areas it may be assumed that the dots mostly indicate the oddments of commerce. It is in the wealthier and more civilized areas that they set a problem in estimation. Firstly, as the authors confess, their uneven distribution often reflects present knowledge rather than past actuality, indicating areas well or ill covered by field-survey. Secondly, they may mean so much or so little, since they cover everything from a small coin to a farmstead or a large number of finds, that the character of what is portrayed becomes blurred. This difficulty, as is demonstrated by fig. 5, might be overcome by area maps, and in densely populated areas, such as the Fenlands are fast becoming, this may well be the future solution. But in fig. 5 a special symbol is introduced with very great advantage for farms and minor occupation sites; and, while this particular symbol would not look well upon a map of a smaller scale, a suitable substitute might be employed. Its presence certainly explains better the devolution of Crawford's 'villages' into native farmsteads, and would avoid, for example, the exaltation of Ewe Close (Westmorland) above its many fellows. It would certainly revolutionize the map of northern Britain and southern Scotland, and opens out a highly profitable line of future inquiry. In praise of the present policy might be quoted the proverb 'il faut reculer pour mieux sauter', and this must certainly be said of the attitude adopted towards the *villa*, a class severely pruned by subtraction of all buildings not categorically proved *villae*. Among them, in Yorkshire, Middleham might have fitted the Bath-house group, while Parish Crayke, in the Leven valley, would enter the lowest category.

Among roads, a new and wholly unproven example is added in Co. Durham between Corbridge and Bowes. The conjectural system west of Gloucester is English rather than Roman in its hesitancy, while the medley of roads in the Tadcaster area near York remains as tantalizing as ever. Yet the striking feature of the map is the amount of additional information on the road-system, particularly in the Midlands and East Anglia. Numerous gaps remain to be filled and there are many loose ends to be tied up; but the over-all picture is of much increased knowledge, due partly to air-survey and partly to improved field-work. The most frequent nodal points in

the growing system thus outlined are of two kinds, often coincident, as at Droitwich or Wall, namely, early fort-sites later abandoned and small walled townships. The emergence of both illuminates the patterns of conquest and peaceful settlement. Among the early fortresses and forts, Wroxeter should carry signs for both a fortress and a fort, while early military tombstones would give forts to Cirencester and Bath, and early finds forts to Sea Mills (Somerset), Buxton, Chesterton (Staffordshire), Kinderton (Cheshire), Wilderspool (Cheshire), Brough on Humber, Aldborough, and Carlisle. But the Cripplegate fort in London lasted long, and deserves a symbol of permanence. Doubt may be expressed about Wall Town in the Welsh Marches, which seems to stand too high for a work early abandoned, while the plan of Pentrich Camp does not carry complete conviction. Most of the points, even where early forts did not exist, are intimately connected with the laying out of the trunk road-system, and this raises the question how far they represent an artificial creation of minor administrative or fiscal centres for the tribes and how far they grew out of existing native centres. Braughing or Alchester, Caistor or Horncastle, might support the latter explanation, but the majority seems to support the former. Special cases are Old Sarum and Badbury. At Badbury in particular air-photography gives no warrant whatever for assigning a posting-station to the spot. The great hill-forts served as sighting points, as does distant Eggardun from Badbury, and they gave their names to a new posting-station, but they had no more relation to the new state of affairs than a rotten borough to a railway-station. The Roman sites may therefore be some distance away, perhaps at the river-crossings. These sites lie in an area very rich in Celtic fields, and it is a pity that no indication of the fact was given upon fig. 5. But the marking of the Celtic fields on the folding map, among which those of the Long Mynd might have been included, is another great gain, and particularly in the Fenland, where it is combined with a record of the canals and ancient river-system. Here air-photography will continue its vast contribution as time goes on.

In the military area, especially in Scotland, there has been a great increase of knowledge, largely owing to the work of Dr. St. Joseph, particularly in Strathmore and the south-west, though it is clear that much more remains to be done. Knowledge of signal-stations has greatly improved: the long-distance system on the Lowland summits will be noted: the crowd on the Gask Ridge is rivalled by that on the Cumberland coast, where the problem of distinguishing mile-fortlets and signal-towers creates special difficulties, which will only be solved by a special map. This applies also to the two Walls, which in any other country would long ago have received sheets to themselves, however far they were from the metropolis. Great progress has been made in place-names and the distinction between certain and probable identifications makes reasonable conjecture possible without misleading. Another excellent innovation is the combination of fort-symbol and settlement-symbol where sizeable extra-mural communities are known, and the registration of over forty examples south of Hadrian's Wall illustrates a state of affairs hitherto not widely appreciated.

Some minor points may be added. In Scotland it was perhaps rash to mark Gourdie as a permanent work. Gatehouse of Fleet is probably a small fort. The Troutbeck group of works includes a permanent fort. Among temporary camps there are two at Dunblane and Featherwood, Cawthorn has four works, and the Silloans group is missing. Lead might have been associated with Caermote and iron with Risingham. Bede's Campodunum, once Cambodunum, has been identified as Dewsbury rather than Cleckheaton. The name for Lundy island is Silura, and for the Scillies Sylinancis. Canvey island is Covennus. The map is gaily bound and the cover in itself attractive, though a purist might sigh for a mosaic picture based upon actuality, for the opportunities are indeed abundantly tempting.

I. A. RICHMOND

Roman Roads in Britain—1. South of the Foss Way. By I. D. MARGARY. 9 $\frac{1}{2}$ × 7 $\frac{1}{2}$. Pp. 255, pls. 17, 11 maps. London: Phoenix Press, 1955. 42s.

Mr. Margary has set himself the task of producing a much-needed successor to Thomas Codrington's survey of Roman roads in Britain, and this is the first of two volumes, covering the greater part of the civil zone. We have only to compare this spacious well-printed and illustrated volume with the dumpy red octavo of 1903 to realize the increase in knowledge and in resources now available to archaeologists. This book is a pleasure to read and handle.

Like his predecessor, Mr. Margary writes for the general reader and for the field worker rather than for the historian or classical scholar. The introduction is designed to foster recognition of a Roman road as it is met with today in the English countryside—whether now in use as a trunk road, as a lane or footpath, or surviving only as a line of hedgerows or parish boundaries—and to explain both its original appearance and its survival. This section owes much to the author's powers of observation and basic common sense as well as to his long experience gained in surveying and excavating Roman roads in the Sussex Weald; it is full of good things. Perhaps in volume 2 there will be room for diagrams to illustrate methods of alignment and for reproductions of excavated sections to show the construction of the agger, which are otherwise well described.

The ensuing chapters are arranged topographically. Each deals with a regional network, for which a key diagram is supplied on which the roads are numbered, single numbers for the main roads like the Foss Way, double figures for the branch roads, and triple for the minor roads. The numbered sections which can readily be identified from a special index, are then described clearly and concisely in terms that are easily followed on the One-inch Ordnance Survey map. This logical system is an excellent innovation and should become a standard practice and an established means of reference.

The author is usually cautious in his description of the many doubtful and difficult portions of the routes; it is a pity that this is not reflected in the key diagrams by more dotted lines to distinguish the known from the probable course. As they now appear, the diagrams are misleading; for example, in the area with which I am familiar, there is now good evidence for four miles of Roman road in the North Tawton areas of Devon (Route 492), but as the text makes clear, its course eastward, probably through Crediton to Exeter, can only be inferred, yet all of it is shown on fig. 3 by a firm line. The same might be said of much of Route 49, from Seaton to Exeter. Route 493 in the same area is admittedly one of the author's few conjectures, but until some evidence for Roman settlement in north Devon can be produced, it seems unwise. Better evidence for the direction of a westward extension of the road system is afforded by the four milestones of third- and fourth-century date from north Cornwall, which are not mentioned in the survey.

Nevertheless, despite its limitations and occasional mistakes which are inevitable when a large-scale project is undertaken by one man, this is a valuable compilation. Field workers in many localities will be stimulated by this book to go out into the countryside to examine Mr. Margary's new suggestions and to reassess the evidence for the difficult portions of the roads.

Since the book is likely to remain a work of reference for some time to come, it would have been useful to have followed the example of Codrington and to have reprinted the text of the *Iter Britanniarum* from the Antonine Itinerary. Some account is needed in the literature of the roads of Crawford, Richmond, and Ifor Williams's article in *Archaeologia*, xciii on the British section of the Ravenna Cosmography which contains a rich store of place-name interpretations and a reproduction of the Peutinger table. A fuller index is also desirable, in which the Roman place-names should be included.

AILEEN FOX

Furniture in Roman Britain. By JOAN LIVERSIDGE. 7½ × 5. Pp. 75 + pls. 69. London: Tiranti, 1955. 10s. 6d.

In this book, scattered and fragmentary evidence is brought together to form a valuable and convincing whole. Many carefully selected photographs, varying, however, in individual quality, both illustrate the book and summarize the evidence. As wood scarcely survives, the sources are representations, or fragments of furniture in other materials. Sculptured reliefs or statues of deities, and scenes on tombstones, are the main source. These are supplemented by occasional metal and shale fragments; in south-western Britain Kimmeridge shale sometimes replaces the more widely used wood, especially for three-legged tables. Reference is made to better preserved examples of furniture, and to representations, from other parts of the Empire. This is as legitimate as it is necessary, for it is clear that all the British furniture for which there is any evidence was part, either of a north-western provincial tradition, or of a widespread and long-established Mediterranean tradition.

By careful comparison of representation with fragment and fragment with representation, points are brought out, clearly and convincingly, which might easily have been overlooked, and have in fact often been overlooked. Couches and beds, chairs, folding stools and tripods, tables, soft furnishings, footstools, and caskets, pass in turn under close inspection. A general impression remains of comfortable bourgeois domesticity, rich, tasteless perhaps, but ordinary, something that has been met before and can be understood.

The day-to-day furniture of the even more ordinary folk, the plain wooden bench or the four-legged stool, inevitably slips through the archaeologist's net, but, as is justly remarked, it was almost certainly to be found in British homes. Among the items for which there is evidence, only the basket chairs approach this category, and even they are of a form derived from the Mediterranean. They are known because they were considered fit for goddesses, or the departed, to sit in. On the other hand, a surprising amount is ascertainable about the furniture of the class which could afford to set up tombstones, or to buy copies of fashionable Roman tables in a local material more expensive, less attractive, but more durable than wood. We are given a glimpse into the villa owner's surroundings, which richly dyed textiles, coloured veneers and inlays, wall paintings and mosaics turned into a 'truly gorgeous spectacle'.
J. P. GILLAM

Buried London. By WILLIAM THOMSON HILL. 8½ × 5½. Pp. 192, with text-figures and plates. Phoenix House, 1955. 25s.

This book grew out of articles written for *The Times* on London's antiquities, not all of them buried.

Several essays are concerned with buildings still surviving from earlier periods, churches and livery company halls in particular, and provide a brief summary of losses due to bombing during the recent war. Another group of chapters covers a perambulation of the City wall and includes a section on the Cripplegate fort, one of the major discoveries of post-war excavations in the devastated areas. The rest of the book deals, in popular form, with the results of rescue operations by the Guildhall Museum and the work of the Roman & Mediaeval London Excavation Council.

With the skill of an experienced journalist the author gives a vivid story of the vicissitudes of the City during the war years. With him we share 'The Peril of St. Paul's', 'Fleet Street Under Fire', and 'The Bombing of St. Bride's'. His accounts of the City churches are a pleasant mixture of ancient and modern: much simplified architectural description, with historical and personal associations, is followed by news of future use. The story of Faith and her kittens mingles happily with other records of St. Augustine, Watling Street.

In reporting on recent excavations Mr. Thomson Hill makes full use of information, published and unpublished, from the Guildhall Museum and the London Excavation Council. This he has filled out with considerable reading on his own account, especially on Mithraism. He disarmingly disclaims profound scholarship. He should, however, have steered clear of Roman inscriptions.

The numerous maps will help the explorer. The photographs are interesting, but several captions need correction. The publisher's failure to number the plates makes that too lengthy a business here; that 'Walbrook, 1954' between pages 24 and 25 should read 'Windsor Court, 1947' illustrates the point.

Mr. Thomson Hill is to be congratulated on his concluding words—ANNO AETATIS EIVS LXXXI.

AUDREY WILLIAMS

The Temple of Nehalennia at Domburg. By ADA HONDIUS-CRONE. $10\frac{1}{2} \times 7\frac{1}{2}$. Pp. 124, 44 plates, 2 figures, Amsterdam: J. M. Meulenhoff, 1955. Fl. 15.

This most interesting study lists and describes the remarkable group of inscribed and sculptured stones from the shrine of Nehalennia, found in 1647 on the sea-shore of Zeeland, north-west of Domburg. The site is now submerged and little is known of its character except that its buildings were small but of substantial scale and that more than one shrine may have existed. The stones, housed in the parish church of Domburg, were grievously mutilated by fire in 1848 and subsequent exposure harmed them still further. To study them at all, recourse must be had to earlier drawings, of which Madame Hondius-Crone makes liberal and valuable use.

The style of the monuments suggests a third-century date for the shrine: a useful British parallel for the curtained shrine is the Chester altar to the Severi and it will be recalled that this period marked the apogee of native cults in Roman Britain. Nehalennia, whose name is obscure in origin, was a goddess of fertility and of the ocean. She wears classical costume, to which is super-added a local style in shawl, cap, and boots. Her attributes are a ship, a basket of fruit, and a dog; and, like the British goddess Coventina, she is once triplicated, to express and enhance her power. Her classical companion deities are Neptune, Hercules, Jupiter, and Victory, and she is associated once with a hunter, human or divine, and accompanied by an altar to a separate native deity, Burorina. Her worshippers include mostly Roman citizen civilians, some with remarkable native *nomina* and *cognomina*, and a liberal sprinkling of *peregrini* with local names, so many as to suggest activity before the *constitutio Antoniniana*. The impression gained is a mixture of Roman citizen merchants, like the self-declared pottery trader to Britain (*negotiator cretarius Britannicianus*), and local sailors and farmers. The whole, in art as in epigraphy, is a particularly interesting example of the effect of cross-Channel traffic upon a purely local cult. I. A. RICHMOND

La Céramique Sigillée d'Argonne des II^e et III^e Siècles. (Supplément à *Gallia* VI). Par GEORGES CHENET et GUY GAUDRON. 11 x 9. Pp. 246 + figs. 63 + tables 5. Paris: Centre National de la Recherche Scientifique, 1955.

As the impressive list (p. 13) of thirty-one papers, ranging in date from 1908 to 1941, shows, the late M. Chenet devoted himself wholeheartedly to rescuing material from the Samian potteries of the Argonne and to making careful records of his discoveries. The records of his research are meticulously summarized in this volume by his friend M. Gaudron, who is to be congratulated on the result. The volume is printed on art paper throughout and has excellent illustrations.

After an introduction on the geological and geographical background of the area, M. Gaudron describes the known potteries. Lavoye, Avocourt, and Pont-des-Rèmes are the most important centres, but several lesser-known sites, some destroyed, are also recorded.

In ch. ii a wealth of technical material is described. This will be of interest to all students of Roman pottery not merely to Samian specialists. Attention may be drawn to the use of polished stone and flint implements (fig. 9), to the illustrations of kilns and kiln-furniture, and to a most interesting series of vessels from Lavoye believed to have been used for applying barbotine decoration (fig. 32 for an example). The methods of decoration follow the usual trends, moulded bowls of form 37 predominate, but the barbotine, 'cut-glass', appliqué, and rouletted types are all represented. There is an especially fine series of barbotined jars (figs. 16 and 29-31), made apparently in quantity at several of the potteries (p. 61), which may be compared with our own colour-coated barbotined beakers. Noteworthy too is the production of coarse ware by the Samian potters, as at Colchester. Some of this, such as the rough-cast and indented beakers, would not be out of place in this country (e.g. fig. 28).

The next sections (chs. iii and iv) give a useful critical list of the potters' stamps with facsimiles of many (figs. 49-54), and a discussion of the distribution of the wares and their date. These details are summarized in useful tables at the end of the book. Altogether 124 names are considered and it is concluded that 94 of these are certainly Argonne potters. In order to eliminate uncertainties, the distribution maps show only stamps of potters with names peculiar to the Argonne. The main pattern of distribution is clear; the Rhineland was the chief market while lesser quantities went to north-east France and to Britain. The British list is incomplete, only London and York being noted. It is perhaps a pity that the distribution of the decorated bowls was not considered also.

No attempt is made to study the moulded decorated ware in detail, and the papers of Ricken (*Saalburg Jahrbuch*, viii) and Oswald (*J.R.S.* xxxv) are still indispensable, but a helpful series of moulds and bowls is given (figs. 55-63), unfortunately only at quarter scale.

The discussion of the date of the industries (pp. 193, 211) is vitiated by lack of stratigraphic evidence and leans heavily on Oswald, whose definition of the term 'Antonine' is, incidentally, misinterpreted (p. 193). As Mr. Eric Birley has pointed out (*Arch. Ael.* 4th ser. xxv, 57) the dating of the East Gaulish industries requires reconsideration. We should add that the dating of Central Gaulish ware of the mid and late second century also needs clarifying. On the basis of the post-war evidence from Corbridge, which is largely unpublished (though see *Arch. Ael.* xxxi, 242 ff. and xxxiii, 241 ff.), Mr. Birley is apparently prepared to assign dates fifty or more years later than Oswald to many potters (cf. *Arch. Ael.* xxxiii, 148). Clearly, the complete publication of every decorated sherd from the two Antonine levels at Corbridge is a vital need. If the quantity of material is sufficient to apply statistics, which may be doubted, then and then only will we be in a position to assign firm dates to the later Central and East Gaulish potters. But first we must have the evidence.

B. R. HARTLEY

Die verzierte Sigillata von Lauriacum (Lorch-Enns). Von PAUL KARNITSCH. 10 × 7½. Pp. 250, with 104 illustrations in line, one plate and a map. Linz: Forschungen in Lauriacum, Band 3, 1955. (Price not stated.)

Dr. Karnitsch is to be congratulated on this excellent contribution to the study of figured samian; so is the government of Upper Austria, which made a substantial contribution towards the cost of publishing a work which does great credit to Austrian scholarship. A brief foreword explains that the book covers casual finds preserved in the museums at Enns and Linz or in private collections, as well as the material excavated in the three seasons 1951-3, mainly therefore from the site of the civil settlement to which Caracalla granted a charter as a *municipium*; one or two

pieces from Wels are also illustrated as comparative material. Next come short chapters on the subject of samian ware in general and on the various centres where it was produced, with references to pieces illustrated in the 101 full-page 'plates' (more properly, text-figures), each provided on the opposite page with a concise discussion of the individual pieces, with select references to the appropriate specialist studies; footnotes, bibliography, and an index of the potters whose products are illustrated and identified, come between main text and 'plates'. The drawings are uniformly excellent, and would have delighted the late J. A. Stanfield: could any higher praise be given? Most of the material comes from East Gaulish or German potteries, with Rheinzabern and Westerndorf predominating; in his discussion of the latter centre Dr. Karnitsch summarizes the conclusions reached by Katalin Kiss in *Archaeologiai Értesítő*, 1946-8, pp. 216-74, making use of a friend's full translation from the Hungarian original: many a 'Sigillatafreund' will have occasion to be grateful for this aid to the study of Westerndorf products, which are of greater interest than one had realized from earlier publications.

South Gaulish ware only takes up three 'plates' and Lezoux ware four, with an overflow on to a fifth. The Central Gaulish potters represented include ALBVCIVS, CINNAMVS (with part of the rim-stamp of CINTVSMVS on one piece) and PATERNVS (two pieces having the control-stamp of his employee SEXTVS); one piece is assigned correctly to CASVRIVS, one of whose signed bowls, from Wels, is illustrated alongside it (Taf. 7, 3 and 4): Taf. 4, 1 too is attributable to that potter (and not to LIBERTVS). Additional certain attributions are: Taf. 4, 4 to LAXTVCSA and Taf. 7, 7 to PVGNVS; Taf. 7, 1 must be assigned to an associate of ARCANVS rather than to that potter himself, for its ovolo has not been noted on any of his signed bowls, while Taf. 7, 6 seems closest to the style of SERVVS. Of the Rheinzabern wares Dr. Karnitsch notes in his foreword that the dating of several potters by Ludowici or Ricken will have to be revised, in the light of the stratification of their products in Lauriacum; we look forward with great interest to learning the extent to which the whole series of Rheinzabern potters must be attached to a new and longer time-scale, reaching well into the third century. But it may be noted that something of the kind is needed in the case of Central Gaulish potters too, as recent work at Corbridge has shown. Typological study may establish the position of individual potters in a series, but it is from site-finds and from stratification especially that a reliable chronological framework must be sought; for German wares, in particular Lauriacum, with its late second-century legionary fortress and the town which quickly grew up alongside it, is clearly destined to furnish copious and important evidence for dating, and it is good to know that its figured samian is in such good hands.

ERIC BIRLEY

The Shrine of St. Peter and the Vatican Excavations. By JOCELYN TOYNBEE and J. WARD PERKINS. 9½ x 6. Pp. xxii + 293. London: Longmans, Green, 1956. 42s.

This is the first comprehensive and scientific account to appear of the excavations beneath the Confession of St. Peter in the Vatican basilica during the years 1940-9. Neither of the writers took any part in these, but each has expertise in Roman archaeology and is familiar with the site; they are competent, therefore, to propound their own opinions, as well as to record the findings of others, and the present notice will attempt no more than to give a summary of their book.

The topics of St. Peter's residence in Rome and of his martyrdom and burial there have long been controversial, and much has been written of what was known or guessed of the remains of antiquity beneath the present Confessio. Urgent appeals for excavation have been made in the past, but for various reasons, many of them strictly practical, nothing was done until 1939-40, when workmen engaged in preparing space for the tomb of Pius XI in the crypt of St. Peter's came upon traces of the cemetery of the early Empire known to exist there. Excavations were then begun in earnest; a street of tombs, many of them containing inscriptions, sculptures, and

stuccos of great intrinsic interest and beauty, was laid bare, and among the tombs at a spot immediately beneath the chord of the apse of the Confessio and the papal altar above it, a large *aedicula* was found. This is shown by archaeological evidence to date from c. A.D. 170 and to have undergone more than one transformation, and numerous Christian *graffiti* of a period around A.D. 300 prove that it was a place of pilgrimage, though the name of Peter does not occur in them. Within the *aedicula* a tomb-recess was found containing bones, but not a skeleton, and there were signs that they had been disturbed. It is not clear from the present account where these bones now rest, but it seems certain that no scientific medical account has been given of them. It cannot therefore be said as yet with absolute certainty that the tomb contained, or was originally thought to contain, the body of the Apostle, though this is highly probable, but there can be no reasonable doubt that the *aedicula* was the shrine of St. Peter referred to by the priest Gaius c. A.D. 200 as a familiar place of pilgrimage. Perhaps the most compelling proof of this is the fact that the plan of Constantine's great basilica was pivoted exactly upon this shrine, though this entailed a major work of excavation and embankment and the obliteration of a whole street of graves.

The book before us falls into four parts. A full description of the pagan tombs with their mosaics, with 32 plates, is followed by a detailed account of the shrine and its subsoil. This section, copiously illustrated by diagrams, requires very close attention and a certain amount of leisure on the reader's part. Next, there is a section on the still enigmatic cult-centre of the Apostles beneath the church of San Sebastiano by the Via Appia, which has been explained by some as a shrine to which some or all of the remains of both St. Peter and St. Paul were translated during the late third-century persecution. Finally there is a section on the building of the church of Constantine and its subsequent history. Here is perhaps the strangest part of the whole story. It seems clear from archaeological evidence, and from the absence of any casket, coffin, or skeleton in the tomb-recess of the *aedicula*, that the tomb was rifled on some occasion by the invaders of Italy, most probably the Saracens of 846. Thus the excavations that have established beyond a doubt the site of the reputed (and probably authentic) burial place of St. Peter have also dispelled all hopes of finding intact the relics of the Apostle.

The text throughout is supported by elaborate and most interesting notes and bibliographical confirmation and is faultlessly printed and produced.

M. D. KNOWLES

La Basilica di Sant'Apollinare in Classe. Por MARIO MAZZOTTI. 11 x 7½. Pp. xii + 280; 7 pls., 93 figs. Studi di Antichità Cristiana pubblicati per cura del Pontificio Istituto di Archeologia Cristiana, XXI. Città del Vaticano, 1954. 4,500 lire.

Despite a large and ever-growing literature dealing with individual aspects of the history and art of Ravenna, very few of its monuments have been the subject of a single, comprehensive monograph. The object of the volume under review is to fill this gap in respect of what has, not altogether unjustly, been claimed as the finest of all surviving Early Christian basilicas, the church of Saint Apollinaris, patron saint of Ravenna, near the site of what was once the flourishing harbour-suburb of Classis. Its scope is sufficiently indicated by the chapter headings—Classis and the primitive Christian community of Ravenna; Saint Apollinaris; the Early Christian cemeteries of Classis; the Saint's burial-place; the circumstances of the church's building; a description of the structure; its history; the mosaics; the sarcophagi and other sculpture; the remains of Saint Apollinaris. An appendix gives the text of a hitherto unpublished MS. account of the building, written in 1511 by one of the monks of Classe and now preserved in the Biblioteca Classense of Ravenna.

It is essentially a work of local scholarship. Its strength lies in the author's intimate knowledge

of the building and his familiarity with the sources, both published and unpublished, which deal with its history. There are many acute personal observations of detail, based in part on excavations undertaken at various points within the building, in 1949 and again in 1953, in part on the work of restoration and consolidation occasioned by the events of the Second World War, during which the church suffered considerable, though happily superficial, damage. One of the book's most valuable features is its account of the vicissitudes of the building since the middle ages—its spoliation by Sigismondo Malatesta to furnish materials for the Tempio at Rimini; its restoration during the eighteenth century by the Camaldolese abbots of Classe, who, for all that their taste was not ours, deserved well of posterity by ensuring the conservation of the essential fabric; its decline after the suppression of the monastery in 1797 to the state of dank, moss-encrusted desolation in which Gregorovius and J. A. Symonds saw it; and finally its rescue and rehabilitation by the authorities of the Italian State, a labour of love in which at times enthusiasm outran judgement. This is a task that the author shows himself well equipped to have undertaken, and one quite as necessary as the study of what survives of the original building. To quote a single instance, it has long been evident that the façade, as it now greets the visitor, discreetly draped in ivy, is a thoroughly unreliable document; but it needed a detailed study of the records to show quite how unreliable it is, demonstrably wrong even in so fundamental a point as its relation to the flanking porticoes of the atrium-forecourt, the foundations of which were exposed in 1870.

Such an approach has, of course, its limitations, and in his treatment of the larger historical problems involved Mazzotti is less successful. Except in the chapter on sculpture, the bibliography cited consists almost entirely of works written in Italian. Thus Otto von Simson's *Sacred Fortress* (Chicago, 1948) figures once only, in a reference which has all the appearance of being quoted at second hand. And yet, whether or not one agrees with von Simson's conclusions, his is without question the most thorough and the most scholarly recent work dealing with the historical setting of the great sixth-century Ravennate foundations and the political and ideological significance of the mosaics with which they were adorned, and some of his conclusions have even crept into Mazzotti's own text. It is hardly surprising that the discussion of this and of kindred topics adds little to what has already been said elsewhere.

What emerges very clearly from the book as a whole is the extraordinary contrast between the vigour of the later cult of Saint Apollinaris and the almost complete absence of any trace of an authentic early tradition about his life and martyrdom. As a good son of Ravenna, Mazzotti does his best to bring the figure of the traditional founder of the Ravennate church to life. But even if the *Passio Sancti Apollinaris* is a document of the sixth century, as he argues, and not of the seventh, the usually accepted date, the political bias of its composition remains too evident for any reliance to be placed on it as a repository of earlier tradition. We are left with the words of Petrus Chrysologus, metropolitan of Ravenna in the mid-fifth century, who refers to his tomb as if it was a familiar object, and speaks of him as first bishop and only martyr of Ravenna. Before that we have nothing. The recent excavations afford an interesting commentary on the literary record. Although the church is built beside the site of a flourishing early cemetery, no trace was found either of any earlier shrine or (with the solitary exception of the pagan sarcophagus of Licinia Valeria; *Felix Ravenna*, ix, 1913, p. 380) of any early graves actually beneath the church. Instead, what may well have been (and later was certainly believed to be) the sixth-century repository of the saint's body was found built up against, and secondary to, the outer face of the outer south wall of the church. Whatever may have been the reason for this most unusual arrangement, the sixth-century church was not a basilica *ad corpus* in any ordinary sense of the term. It can hardly be a coincidence that the apse mosaic, with its (for its date) quite unprecedented exaltation of the figure of the saint, portrays the very words of Petrus Chrysologus, 'ecce ut bonus pastor suo medio assistit in grege'. It looks very much as if these words had already become the accepted source of later tradition; and, whatever may have been the underlying core

of historical fact concerning the first Christian community in Ravenna and its founder, as a significant historical figure Saint Apollinaris emerges as a product of the ecclesiastical politics of the fifth and sixth centuries, the figurehead of Ravennate pretensions to ecclesiastical independence.

A few random comments. In support of the ninth-century date which the author proposes for the raised presbytery and semicircular crypt (p. 151), he might well have quoted the Roman precedents, which all appear to stem ultimately from the work undertaken in St. Peter's by Gregory the Great, and more immediately from the revival of interest in Early Christian architectural models under the Carolingian Popes. To the vexed question as to whether the nave colonnades are in their original position or (as Corrado Ricci and Gerola maintained) were taken down and re-erected at a higher level at some later date, Mazzotti proposes a compromise solution (p. 136). If his observations on the character of the masonry above the arcades are sound (and, so far as one can judge without detailed photographs or drawings, they would appear to be so), it is surely more reasonable to believe that the evidence of sporadic and at times ill-recorded excavations below pavement level has been misinterpreted and that the columns are in fact standing today as they stood when the church was dedicated. It should be noted that the carving on the raised plinths is absolutely typical of Justinianic work, both in Ravenna and elsewhere. The author's use of the detailed study of masonry techniques as an aid to the analysis of structure is a step in the right direction, one which he might very usefully follow up in connexion with the other buildings of Ravenna.

In conclusion, is it too much to hope that the authorities responsible for the brilliant practical work of cleaning and consolidating the mosaics of Ravenna will give us a detailed and fully documented account of their discoveries? Any visitor to Ravenna who has been privileged to see the work in progress, and to catch a glimpse of its possibilities in affording new and strictly objective evidence on questions that have vexed generations of art-historians, cannot fail to realize that this is the essential prerequisite of any useful advance not only in the study of the mosaics of Ravenna itself but also in the whole field of Early Christian mosaic-work.

J. B. WARD PERKINS

Offa's Dyke. *A Field Survey of the Western Frontier-works of Mercia in the Seventh and Eighth Centuries A.D.* By SIR CYRIL FOX, F.B.A. 10½ × 8½. Pp. xxii + 318, with 46 pls. London: for the British Academy by Geoffrey Cumberlege, 1955. 63s.

Offa's Dyke, the boundary line of Cymru, to use the vivid phrase adopted by Sir Cyril Fox in his summary, forms the symbolic frontier between the English and their older highland neighbours, the Welsh. It is a major field monument and this volume is a classical example of the treatment such monuments deserve. The work is primarily a field survey carried out by the author and his colleagues between 1926 and 1934. The results were then published year by year in *Archaeologia Cambrensis*. This scattered publication would in any case be inconvenient for reference and is rendered even more so by the change in format of the series which occurred during the period. On every ground a welcome is to be extended to the British Academy's decision to reissue the whole survey in a single handsome volume. The original six reports have been reprinted with a few verbal alterations and the additions required to incorporate the results of subsequent research; the latter are mostly in the form of footnotes distinguished by the year of re-editing, 1953. To these reports are added the author's Sir John Rhys Memorial Lecture, delivered to the Academy in 1940, a new preface, and a foreword by Sir Frank Stenton.

The field survey is a model of its kind. The O.S. maps reduced to a uniform scale, the levelled sections, also drawn to a uniform scale, and the magnificent series of photographs provide a clear, comprehensive, and permanent record of the earthwork as it was twenty-five years ago; their

value can never fade. Sir Cyril Fox, who came to Wales already prepared by his work on the Cambridgeshire Dykes, set a standard, which later workers have endeavoured, often in vain, to follow. New features in the present reprint are the coloured maps provided by the Ordnance Survey, which enable the whole layout to be quickly seen, and the more copious and convenient cross-references, which a unitary publication permits. The incidental information provided by the survey is of intense interest to historians and archaeologists covering, as it does, subjects so diverse as the distribution of arable and forest on the eighth-century frontier and the organization of river traffic along the lower Wye.

The general reader will probably ask first about the historical and political significance of the Dyke; here he will find a lucid and carefully argued survey covering many fields of research. Only the study of place-names fails to provide its quota. This is no criticism of the author, but a record of the fact that the English Place Name Survey has not yet covered the counties forming the Marches of Wales. The historical background is more complex than would appear at first sight. The survey reveals the Dyke as a unitary work and excavation proved its post-Roman date. Sir Cyril Fox cogently argues for the traditional ascription to Offa of Mercia (757-96), an authorship already recorded by Bishop Asser within a century of the great king's death. The argument is accepted by Sir Frank Stenton in the foreword—it had in fact been accepted by most scholars, including the late Sir John Lloyd—and may now be considered beyond challenge. But beyond and beside Offa's Dyke are a number of shorter earthworks of similar character and to the east, covering the northern part of the frontier, is Wat's Dyke, a parallel work set nearer the lowlands. The 'short dykes' are convincingly explained as local works designed to protect vulnerable areas as the Saxon settlers pushed forward into the hostile highlands; 'the earliest . . . may well be of the age of Penda (632-54)'. In Radnorshire these short dykes indicate an old penetration well beyond the line of Offa's Dyke and, as Sir Frank Stenton has elsewhere pointed out (*Royal Commission on Historical Monuments: Herefordshire*, iii, lvii), the early forms of names such as Burlingjobb lend some support to this thesis. Wat's Dyke is explained as a precursor of its greater western neighbour, and attributed to Aethelbald (716-57). The reasons for this conclusion (pp. 272-3), though powerful and compelling, lack the lapidary certainty that distinguishes the rest of the historical argument, in particular there is no very convincing reason for circumscribing the 'permissible limits' to 'about 700-50 on the one hand, 800-50 on the other'. A wider range does not seem excluded by the purely archaeological arguments and this would permit a consideration of the possibility that Wat's Dyke was the work of the West Saxon heirs of the great Mercian tradition, who were responsible for reorganizing the Midlands after the Danish wars.

A final word may be permitted. Almost the whole of this volume was written over twenty years ago. It is dated only by the years placed in parentheses at the end of each chapter heading. The survey was the work of a pioneer; it remains a vital, up-to-date study, a necessary tool of every worker in this field.

C. A. RALEGH RADFORD

Valsgårde 8. Af GRETA ARWIDSSON. 12×90. Pp. 150+pls. 44. Uppsala och Stockholm: Almqvist & Wiksells Boktryckeri AB., 1954.

The excavation of Migration period boat graves is one of the most exacting exercises in field technique. Not only has the archaeologist to deal with the vestigial remains of the boat itself, but with the 'ghosts' of richly decorated harness and accoutrements often laid in great profusion around the dead. The Uppsala school of archaeology, under the leadership of Professor Sune Lindqvist, has brought the specialized techniques involved to a fine art in the examination of the seventh-century boat burials at Valsgårde in the province of Uppland, Sweden.

Dr. Greta Arwidsson, who described one of the richest graves, Valsgard 6, in the first volume of the present series, now offers us an equally important and valuable account of Valsgard 8 excavated by the school in 1936. The boat, as revealed by its 'ghost' impression, clinch nails, and fragments of wood, was an oak-keeled vessel, 8 metres long, propelled by four or five pairs of oars, provision apparently being made for a sail as well. Pieces of wood along the gunwale were decorated with simple incised running S pattern. The grave pit was much wider than the boat, allowing two horses to be interred on the north side. The dead warrior had been placed in the centre of the boat, the floorboards being covered aft with barge bark mats, some bearing traces of decoration. The grave goods were exceptionally rich including another of the Vendel period helmets with chain visor, coat of mail, two large round shields, ring sword, spear, and arrows. Equestrian harness included bridal bits, headgear, halters, and a saddle, while a dog collar and lead commemorated the pleasures of the hunt. Drinking-horns, a glass beaker, a large cauldron and chain, though badly crushed in the settling of the mound, have all been faithfully restored. Everyday objects such as an axe, chisel, whetstone, shears, pincette, comb, and iron strike-a-light were recovered together with fragments of a gaming board and playing pieces. Beneath the shields fragments of cloth were preserved. Careful analysis shows that these formed part of linen and woollen articles woven in a series of decorative patterns, the Oseberg technique being particularly well represented. Among the most interesting remains were pieces of several cushions or pillows and bolsters with feather filling and a woollen mantle.

An analysis of the richly ornamented metal work leads Dr. Arwidsson to date the grave to the second quarter of the seventh century, probably to the decade 640-50, the objects being closely comparable in style to the contents of Vendel XI. The grave is, therefore, somewhat earlier than Valsgard 7 which, together with Vendel XII may be dated to the third quarter of the century.

The integrity of field and laboratory research is beautifully illustrated by drawings and an excellent series of plates not only of the individual finds but also of their reconstructions.

J. R. C. HAMILTON

Viking Congress, Lerwick, July 1950. Edited by W. DOUGLAS SIMPSON, F.S.A. 9×5½. Pp. xxvi+294. Aberdeen University Studies, No. 132. Edinburgh: Oliver and Boyd, 1954. 30s.

Aberdeen University and the British Council sponsored the First Viking Congress in 1950 which brought together scholars from Scandinavia, Iceland, and Britain interested in the Norse history, language, folklore and archaeology of the Shetland Islands. The present volume, edited on behalf of the sponsors by Dr. Simpson, contains a selection of the papers delivered and notes on the principal monuments visited during the fortnight's session in Lerwick.

The main theme is followed in a series of papers on Viking colonization: *Viking Movements* by the late Professor H. Shetelig; *Orkney-Shetland-Iceland* by E. O. Svensson, and *The Norse in the Hebrides* by the late Sir Lindsay Scott. Specifically Shetland studies appear in Professor W. Croft-Dickinson's *Odal Rights and Feudal Wrongs*; T. M. Y. Manson's *Historical Problems to the end of the Old Earldom*; O. Lundberg's *On the Shetland Sea Language*; A. B. Taylor's *Shetland Place Names in the Sagas*; and D. Murison's *Scot's Speech in Shetland*.

The archaeological papers are principally notes summarizing fuller publications such as Ragnar Knudson's *Viking Military Organization and the Danish Trælleborgs*; A. O. Curle's *Farlishof*; and C. S. T. Calder's *Neolithic Temple at Stanydale*. Dr. Simpson, in attempting a new structural analysis of the broch of Clickhimin, advocates a northern origin for these towers as opposed to a western and sees them as the strongholds of a conquering aristocracy. Recent excavation, however, has shown that the argument advanced by Dr. Simpson for the forework at Clickhimin being the gatehouse of a continuous barrier is no longer tenable. It can now be shown

on stratigraphical grounds that the ring wall and the enclosed forward are contemporary, representing a type of ring fort or promontory fort exemplified at the Loch of Huxter and the Ness of Burgi which appear to have been in vogue prior to the building of the brochs. At Clickhimin these defences succeed a yet older Iron Age occupation of the islet.

In another paper the late B. H. St. J. O'Neil argues that the brochs were erected by the native population against some external threat, in this case Roman slave-traders.

A series of notes intended for the guidance of Congress Members to such well-known monuments as Skarabrae, Maeshowe, and St. Magnus Cathedral are included in the volume.

J. R. C. HAMILTON

Danske Adelige Gravsten fra Sengotikens og Renaissancens Tid (1470-1600). Af CHR. AXEL JENSEN. 10×6½. Text, Vol. I, Pp. 287+pls. 22; Vol. II, Pp. 378+pls. 10; with 5 folders of plates (114 in all)+index (13 pp.). København: Andr. Fred. Høst & Søn's Forlag, 1951-3.

Towards the end of the fifteenth century the main type of sepulchral monument in Denmark was the incised slab. Its style, apart from the marginal inscription and evangelistic symbols derived from the Franco-Flemish 'tombes plates' via the Hanse towns, followed that of South Germany, particularly in its treatment of the human figure, depicted in free-standing attitudes in contrast to the praying posture adopted throughout Western Europe.

Before the close of the century the first stage of transition from the flat engraved memorial to sculpture is evident in the cutting away of the background on some incised slabs to show the design in 'flat relief'. Thence progression was steady through low to full relief, coupled with the absorption of Italian Renaissance ornament by way of Germany and the Netherlands. This is the theme of Dr. Jensen's survey, a masterly achievement, in which nearly 1,000 monuments are catalogued and described.

The period is divided into almost equal halves by the Reformation, but the triumph of Lutheranism had little adverse effect on sculpture, the decline in ecclesiastical ornament being balanced by an increase in luxury building and in the splendour of sepulchral monuments.

The author's researches have identified at least a dozen workshops within the boundaries of the larger Denmark of those days, besides distinguishing the work of twenty-four artists, three—Johannes Prigge (c. 1470), Adam van Düren (fl. 1499-1532), and Claus Berg (fl. c. 1508-40)—being Germans, and one (the great Cornelis Floris) a Fleming. Among native carvers, Morten Bussert of Copenhagen (fl. c. 1523-52) deserves to be immortal for his charming family groups. Hans Maler of Roskilde (fl. c. 1549-78) and Gert van Groningen at Aarhus (c. 1560-90), though great decorative craftsmen, lacked the power to breathe life into their figures, but Oluf Krog (fl. c. 1560-1600), who displays considerable invention, achieves some vivid portraits, notably a burgomaster of Køge and his wives (pl. 104). Eleven of the native artists are anonymous, and three known only by their initials.

Of chief interest, perhaps, to antiquaries in this country are the differences between Danish and British costume and armour as portrayed on these monuments. They are especially noticeable in female dress. The Hornslet lady (1470) is attired like English ladies of c. 1410. The pedimental head-dress does not seem to have reached Denmark at all, or the 'Paris head' bonnet till about 1570, contemporary Danish ladies being either shown bareheaded or in wide caps, sometimes with two long streamers descending nearly to the ankles (pls. 32, 35, and 52) or wearing smart, attractive hats (fig. viii, pls. 49 and 69).

The armour is of German type, with helmet up to c. 1560, after which figures are usually portrayed bareheaded. Occasionally they wear a civilian bonnet (pl. 30), while one (pl. 73) is in a plumed morion. Most hold a war-hammer in the right hand, a few the lance. The skirt of mail, so typical of early Tudor armour, does not figure at all.

Civilians often wear a bonnet or hat and hold gloves; one (pl. 70) has a high fur cap. Clergy after the Reformation are normally dressed like ordinary civilians, and a canon of Roskilde (pl. 65) even wears a sword.

Save for the banishment of saints, the Reformation did not interfere with the portrayal of religious subjects. The Crucifixion (pls. 76 and 110) and Resurrection (pls. 75 and 108) frequently occur, also the sacred monogram (pls. 89 and 104). Other subjects are the symbols of the Evangelists (pl. 111), Christ judging the world (pl. 77), the risen Christ carrying the scourge and the reed and sponge (pl. 103), and the Trinity, with the Father depicted as a corpulent Viking with long drooping moustaches (pl. 53).

The selection of monuments illustrated (249 in all) affords a balanced view of Danish sculpture of the period, which at its best is very good indeed. Some poor and even bad work has necessarily been included, but the average will compare quite well with that of contemporary work in Britain.

Where so much has been given, it seems ungrateful to hint that yet a little more could have been provided, but the choice of photogravure for the illustrations was unfortunate. Ordinary photographs would have given better definition, and the incised slabs should, wherever possible, have been illustrated from rubbings, particularly the great Hornslet slab (pl. 7), which is most inadequately portrayed.

F. A. GREENHILL

English Mediaeval Architects. A Biographical Dictionary down to 1550. By JOHN HARVEY. 7½ × 10. Pp. xxiii + 412. London: Batsford, 1954. 75s.

This important compilation is worthy of very high praise. Great industry, care, and self-dedication, over many years, have gone to the preparation of it. Mr. Harvey and his main contributor, Mr. Arthur Oswald, are to be unreservedly congratulated upon their work.

The book begins with a short preface devoted mainly to acknowledgements; a shorter foreword explains the scope and apparatus of the entries. A list of abbreviations, abbreviations to three letters at most, printed in double column, fills the next ten pages, no less. Thereafter the biographical entries, arranged alphabetically under surnames, christian names, or toponyms, are introduced by a short and admirable essay, which says something of medieval patronage, of where responsibility for design lay, of the royal works, and of the classes of records that provide the available evidence for the architectural history of buildings. To those who are inclined to distrust as too facile nine out of ten attributions of works to named master craftsmen pages 11 to 13 of this essay may be commended for their sane evaluation of the evidence for, and the present state of knowledge of, the authorship of our medieval buildings.

The biographical entries vary from the brevity, for example, of 'Rousby, Robert de, (fl. 1372-75). Chief mason at Berwick-upon-Tweed in 1372-75. PRO, E. 101-483-2' to the definitive account of the life and death of, say, John Wastell in eight pages. The brevity, obviously enough, is due to the paucity of original references, but the opposite, beyond a point, does not hold. For Robert of Beverley, Reginald Ely, for example, and others, the rather fuller information that has rewarded research has made a critical examination possible of the man's products and the assignment, by reasoned attribution, of a body of work to him. Given the skeleton, flesh has been added. Indeed, after reading some of the entries that include details of a man's private and public life and establish his status as an architect with reasonable certainty, one is inclined to say with Lady Macbeth 'who would have thought the old man to have had so much blood in him'. Some 1,300 names are included in the dictionary; a mere score, as Mr. Harvey says, appear wholly as architects.

Generally the subjective attributions are carefully argued and carry conviction. All the more

noticeable, therefore, and seemingly out of place, are the pure conjectures: for example, two in Robert of Beverley's entry, paras. 1 and 12, or William Swayn's entry, end of para. 2. These and others like them make this a book for the professional and not the amateur.

It is a constant source of interest in turning the pages of the dictionary to note how often the names of the craftsmen and the tasks done of themselves reveal the chronology of the entries: from Teinfrith or Wigbert at the beginning of the period to John Russell carving 'antye heddes' in 1531.

The apparatus of cross-reference at the end of the dictionary is remarkable. Excluding two intrusive appendixes, it occupies eighty-three pages and includes a key to christian names, a topographical index, a county index, a chronological table, a subject index of buildings, and a general index. The only criticism of any consequence is concerned with these. Admirable as they are, working with them would have been proportionately simplified by combining the key, the topographical and the general indexes.

With these minor qualifications the dictionary is to be welcomed as a great work splendidly done, and admirably produced by Messrs. Batsford.

In conclusion, perhaps a reference here to the remains of the great Vienna Cathedral 'plan-chest' is not out of place. The immensely impressive medieval and early sixteenth-century architectural working-drawings, or near working-drawings for want of a more exact description, surviving in Europe await comprehensive publication. May the idea commend itself to Mr. Harvey!

A. R. DUFTY

The Thirteenth Century, 1216-1307. By SIR MAURICE POWICKE. (Oxford History of England.) 8½ x 5½. Pp. xiv + 829. Oxford: at the Clarendon Press, 1953. 30s.

The appearance of this volume, the fourth in the well-known series of the Oxford History of England, is in itself an occurrence of more than ordinary moment, providing as it does, a wonderfully complete panorama of the events of one of the great formative periods in the history of our country. Coupled with the author's well-known earlier work, *King Henry and the Lord Edward*, published in 1947, it will remain an outstanding contribution in this field, drawn as it is from the author's rich store of knowledge based on a lifetime's study of the sources of the period.

It is difficult in a brief review to do anything like justice to this valuable work or to indicate its scope and method. At first sight we seem to be given a political and descriptive narrative of the period, critical and discursive, recording the activities of the king and his Council, concerned, it may be, with the baronage, traditionally co-operative though often gathered in splintering opposition, or with the Church subject to legal difficulties through its involvement in secular society, or again with the fluctuating alliances in defence of the remnant of the Angevin Empire, or with the tangled politics of the Rhone Valley and the Pyrenees. The picture, however, which emerges is something more—indeed far more—than a history of political events, for the narrative is given the quality of stereoscopic depth, partly by a wealth of personal, genealogical, and topographical detail which reveals the underlying dynastic interests from which arose the policies and crises of a feudal society and partly by the elucidation of the minutiae of legal innovation and administrative technique by which the Crown was welding that society into the community of the realm. It is by this treatment in depth, by building up through innumerable instances an impression of the processes underlying the surface of political events that the author conveys his interpretation, indirectly and concretely rather than by the more usual methods of generalization and interpretation.

The work thus offers a monumental example of the type of historical writing which aims to present the events of an age as they appeared to contemporaries rather than to find in them the origins of subsequently significant developments, seeking thus to distil from historical study the

imaginative experience of entering into the life of another age rather than to trace the evolution of our heritage. Implicit in the presentation is an awareness that historical generalization is a falsification, involving, as it does, abstraction from reality in which the more immediate significance of events is lost and the complexity and fluidity of historical processes are obscured. The author, indeed, for the most part seems to refrain from expressing the thirteenth century in a form which might imply a single pattern and he limits generalization to rare subtle understatement, preferring thus to suggest conclusions by the dissection of concrete situations and allowing the facts to tell their own somewhat ambiguous story in the light of the evidence as it has come down to us.

From this approach the reader will hardly expect to find a full-scale summing up of the scholarly controversies as to the long-term significance of such important issues of the age as the Baronial opposition of 1258 and 1297 and the origins of Parliament, or a redefinition in the light of recent work of the changing character of feudalism or of the Church. At times the narrative builds up into a fuller discussion of subjects of more general interest such as medieval finance, the royal prerogative, baronial franchises and the decline of knight service, and the chapters on the 'Periods of the Statutes' and the 'Community of the Realm' will be read and re-read with the greatest interest and profit though some disappointment will be felt at the absence of any treatment of the rich social and economic background of the period.

It is difficult entirely to agree with the author on certain quite important issues or, indeed, to be happy about some of the basic assumptions underlying the argument. In dealing with various sources of opposition to the Crown, it hardly carries us far to learn that 'Edward (I) was king and at times did not hesitate to appeal from law and custom to a higher law and to considerations of general well-being and the necessary interests of the realm'. Nor could the Lords Marcher of Wales in 1291 accept with equanimity the somewhat novel doctrine for the March that 'the king by his prerogative, in the common interest was in many cases above the laws and customs used in his realm'. Montfort comes in for a good deal of criticism, amounting almost to hostility, but the Barons' War was something more than 'nine incoherent years' and Montfort himself more than one who merely 'divided the land'.

Llywelyn, Prince of Wales, too, holding his territory in sovereign right would in his day have regarded as entirely doctrinaire the view that Edward I's hold over Wales rested upon some 'higher imperial kind of right'. Such a claim has in it something akin to ideology whereby aggressors have ever masked their designs. The nature of Llywelyn's dependence on the Crown was personal in character, based upon a former 'oath of protection' of Welsh rulers in pre-Norman days but by the thirteenth century the aims of the Crown in Wales were manifest and the Welsh were engaged at every turn to counter the attempts to convert the non-territorial bond into a direct feudal hold of the land, which would have meant the loss of their sovereignty and independence. It was the attempt of the king after the first Welsh War of Independence in 1277 to assert rights of suzerainty within that section of Llywelyn's territory which still remained sovereign to him under the treaty, recently signed by the king at Aberconway, that precipitated events which in due course were to lead to the second war and the loss of Welsh independence.

These criticisms notwithstanding, the volume ranks as a solid achievement, especially stimulating and informative to those whose approach to history is mature and contemplative. They will turn to this great work of scholarship and artistry with deepening appreciation.

WILLIAM REES

Sculpture in Britain: The Middle Ages. By LAWRENCE STONE. 10½ × 7. Pp. xxii + 297 + 306 illustrations + 12 figs. in text. The Pelican History of Art. Penguin Books, 1955. 45s.

The study of English medieval sculpture has recently entered a new phase of research and

stylistic analysis. Following the lead of Dr. Zarnecki, the whole field has now been ably reviewed by Mr. Stone. The documentary evidence is here for the first time adequately linked to that of style, and a well-kept balance between documents and works, and common sense added to aesthetic perception, are the outstanding features of the book.

Limited only by the framework of the series in which it appears, the volume leaves little to be desired and the beautifully reproduced plates are representative of all the most significant phases from the seventh century A.D. to the opening of the sixteenth. The only major criticism concerns the term 'Britain' in the title: virtually all the works discussed are English, and no account whatever is given of the development of sculpture in Scotland and Wales. Title apart, it is clearly wiser to accord these adequate treatment elsewhere.

The excellent Introduction somewhat exaggerates the humble status of the carver, for many did belong to the 'aristocratic' group of masters; some indeed were sculptor-architects. It is, too, misleading (p. 4, no. 20) to put the present earnings of a working mason as merely 'well over forty times' the sum (about £7. 10s. a year) earned at Eton College in the 1440's. The fifteenth-century rate amounts to about $\frac{1}{4}$ d. per hour against a present ruling rate of about 4s., a ratio of 90-100 rather than 40 or so.

Occasionally Mr. Stone departs from his general reasonableness: to suggest severe nineteenth-century recutting of the face of the Lincoln 'Queen Margaret' (p. 127, n. 26) is to reject the conclusive evidence of weathering, which fully supports the integral antiquity of the statue; it is precisely lack of weathering that throws suspicion on the All Souls figures (p. 206 and n. 40). On a bigger issue it is going against the documents as well as the multitude of lifelike carved faces to claim (p. 161) that there was by the early fourteenth century 'no sign of any attempt at genuine portraiture'.

A few minor corrections: the Norwich cloister dating (p. 158, n. 6) rests not upon William Worcestre (not 'of Worcester'), but on an anonymous interpolator; the Master Thomas who may have designed the Exeter throne (p. 173, n. 60) is better not described as 'of Winchester', for Winton (Wincon?) is equally likely to represent Wincanton (Mr. L. S. Colchester's suggestion); the famous whalebone panel (p. 64 and pl. 41) has been shown by Mr. John Hunt (*Connoisseur*, April 1954) to be of Spanish origin. Finally, in the single case where style and documents appear to be in conflict, in regard to the statuary of the Oxford Divinity School (p. 226 and n. 62) it is all but certain that Mr. Stone's interpretation goes beyond his text: the carvers working in 1481 were concerned with carving *imagines* and setting them *arcualiter*, clearly the figures in the pendants and perhaps also the bosses, as distinguished from the (apparently) archaic figures of the screenwork, which probably are (*pace* Mr. Stone) the work of John Massingham and thirty years earlier in date.

This is not only a valuable work of reference, but a good book.

JOHN H. HARVEY

The English Church in the Fourteenth Century. By W. A. PANTIN. Based on the Birkbeck Lectures, 1948. 8 $\frac{1}{2}$ x 5 $\frac{1}{2}$. Pp. xii + 292. Cambridge: at the University Press, 1955. 25s.

This is certainly one of the most interesting books on the English medieval Church that has appeared since the war. The period with which the author deals has suffered much neglect and the reviewer's only regret is that Mr. Pantin has not given us the general picture he is so well qualified to draw. The scope of his work is indicated by the sub-title—'Church and State, Intellectual Life and Controversy, Religious Literature'.

His treatment of the first of these topics is particularly illuminating and clears away much misunderstanding on the subject, notably on the nature and extent of papal influence on English benefices in the period. The analysis of the episcopate with 'the main trend towards the exclusion

of great theologians from high places' establishes a change from thirteenth-century practice which has been very fashionable since. The second section of the book is somewhat less valuable as the author concentrates on 'selected personalities, particularly some of the less familiar ones'. His consideration of smallish fry like Uthred of Boldon is accompanied, *inter alia*, by only passing references to the obstreperous but all-important Wyclif and inevitably produces an insufficient picture of the intellectual scene.

The final section on 'Religious Literature' teaches the same high standard as the first. It deals with manuals of instruction for parish priests, religious and moral treatises in the vernacular, and the famous mystical literature of the period. Though one may regret the omission of the English Bible from this list, one's disappointment quickly cedes to admiration at the sound learning and religious understanding with which the author treats these significant themes.

At every point Mr. Pantin is careful to view his subject against the thirteenth-century background and brings out with great clarity the ethos of the age with which he is concerned. His writing is always clear and lively, his judgements mostly convincing and invariably stimulating [e.g. his ingenious apologia for Margery Kempe—'it would be difficult to imagine anyone less like Mrs Proudie']. The book is attractively printed and the proof correcting admirably done.

J. C. DICKINSON

English Medieval Castles. By R. ALLEN BROWN, M.A. D.Phil. 9 × 6. Pp. 208. London: Batsford, 1954. 16s.

The study of medieval architecture has advanced from a scrutiny of the design and construction of the buildings themselves to an examination of the underlying documentary evidence. This technique, first applied to cathedrals, churches, and monasteries, has subsequently been carried into the field of domestic architecture, and Mr. Brown now applies it to English and Welsh castles. While summarizing the long-published views of earlier writers on the architectural history of the castle, he introduces much new material drawn from documents, not only about construction, but about the uses of the castle as well. The book, therefore, which throughout is very useful, is in part wholly original.

One of the most valuable services that Mr. Brown performs is to remind us that the castle was much more than a fortress and played an important part in peace, whether as dwelling-house, treasury, arsenal, gaol, or office. He confesses that it is in these, perhaps subsidiary, directions that investigation is most needed. He might have added that we also need to know a good deal more about the administration of castles, how far, that is, they were entrusted to sheriffs and how far to specially appointed constables or keepers, and what were the responsibilities of those officers for the repair and defence of the buildings.

The book is not, of course, a guide to castles and does not aim at describing any of them exhaustively. Indeed some well-known castles are wholly ignored. There is no mention here of Barnard's Castle, Sherborne, Devizes (the most splendid fortress in Europe, as Henry of Huntingdon described it), Monmouth, or the group of castles in Radnorshire, while Oxford and Wallingford occur but once. It is greatly to be hoped that Mr. Brown will some day compile for us a tolerably complete inventory of castles, furnished, as precisely as possible, with such details as the origin, enlargement, decline and management of each. This would provide the Ordnance Survey with material for a new set of historical maps to range with the monastic maps of Britain.

The illustrations are wisely chosen, including as they do, air photographs, prospects, plans, and drawings of architectural details and siege engines. They are made intelligible to the layman by well-drafted underlines. Indeed it is one of the merits of this book that its author has kept equally in mind the needs of the layman and the specialist.

R. B. PUGH

Dundarg Castle. A history of the site and a record of the excavations in 1950 and 1951. By W. DOUGLAS SIMPSON, F.S.A. 9×5½. Pp. xii+95+pls. 25. Aberdeen University Studies, No. 131. Edinburgh: Oliver and Boyd, 1954. 18s.

It was inevitable that the promontory of Dundarg on the south coast of the Moray Firth should engage the attention of Dr. Simpson, renowned for his studies of the Scottish medieval castle. For here, on this precipitous promontory, defended by a triple system of ramparts and ditches stand the fragmentary remains of a fourteenth-century castle built on the site of an older stronghold of the Comyns. A much earlier occupation of the site could be postulated if it were identified with the *cathair* of Aberdour granted to St. Drostan by a ruler of Buchan in the sixth century according to a much discussed insertion in the Book of Deer. It was with the hope of obtaining concrete evidence of this early Christian settlement that Dr. Simpson began a limited excavation of the inner ward of the medieval castle in 1950. The present work contains an account of his discoveries and of an investigation of the rampart and ditch system by Dr. F. T. Wainwright, whose report forms the latter part of the book.

Within the ward and in the area of the supposed Celtic monastery the only remains to be fully explored were the foundations of a small rectangular building 20 ft. by 11 ft. whose size, orientation, and opposite entrances suggest that it may have been used as a small chapel. The entire absence of any dating evidence, however, cannot allow more than a tentative association to be made with the early Christian period, though Dr. Simpson argues strongly for its acceptance.

Dr. Wainwright's examination of the triple ditch and bank defences was also limited but he was able to show with relative certainty that, while the innermost ditch was related to the medieval castle, the two outer ditches and ramparts were structurally earlier. Here again, however, the complete absence of datable finds do not allow their precise age to be established.

Dr. Simpson has inventoried the finds made in the excavations of 1911-12 and though these were not stratified, some point to prehistoric occupation. It seems reasonable to infer that the bivallate defence is that of an Iron Age fort but whether it was occupied in the sixth century and witnessed the building of a Christian settlement are points still open to question. It is, therefore, to be hoped that further work will be undertaken to obtain conclusive evidence at some future date.

J. R. C. HAMILTON

Old St. Paul's Cathedral, A lost glory of mediaeval London. By G. H. COOK. 9½×6. Pp. 112+pls. 42. London: Phoenix House, 1955. 42s.

Mr. G. H. Cook has shown courage and enterprise in his attempt to write for the general public an architectural and historical guide to a church which no longer exists. By the aid of careful descriptions supported by 42 plates and 8 diagrams, he is able to give every reader some sense of what Old St. Paul's looked like. The core of his work, chapters ii-v consists of a description and historical account of the fabric, and this is particularly vivid in relation to the seventeenth century and the 'restorations' effected or proposed by Inigo Jones and Sir Christopher Wren before the whole situation was changed by the Great Fire.

In a book of this nature it is perhaps ungracious to cavil at the lack of footnotes, especially when a short but helpful bibliography is given. There are times, however, when a closer and more detailed argument would have been helpful. On p. 33, for example, it is stated that the four western bays of the choir could not have been built as early as 1241, since in style they were uniform with the eight bays to the east (1256-c. 1312). How then can one account for the differences in the plans of the piers (diagram iv, p. 35)? In the captions to the illustrations, also, a little more help might have been given. Nos. 4, 6, 13, and 16 are from modern drawings, but the fact is only stated (in a roundabout way) in the Acknowledgements. Comment on the differ-

ences of detail to be noted in plates 18 and 19 would also have been helpful. But in general it must be stated that the illustrations are both well-chosen and helpful, and that they play a notable part in making this an attractive book.

R. H. C. DAVIS

The Religious Orders in England, vol. II, *The End of the Middle Ages*. By DOM DAVID KNOWLES. 9 $\frac{3}{4}$ x 6. Pp. xii + 407. Cambridge: at the University Press, 1955. 45s.

Professor Knowles has made an exhaustive survey of the Religious Orders in England from 1340 to the end of the Middle Ages. He has garnered the fruits from records published since 1900 as well as from the researches of other scholars and has interpreted them with wisdom and understanding. From a study of individual houses he has set aside facile generalizations of other historians on the influence which the Black Death exerted on the financial situation of the monasteries; it merely accelerated the change to leaseholds from the high farming of the great Benedictine houses. The Cistercians had depended for exploitation of the land on the recruitment of lay brothers, when this failed they too had recourse to leases. Perhaps the most striking chapters of the book are those in which Professor Knowles has drawn portraits of individual monks, abbots of the Benedictine monasteries of St. Albans, Westminster, Canterbury, and Durham, and of Abbot Clown of the Augustinian house of Leicester. The careers of University monks of Oxford are a fresh topic of interest, well illustrated in the life of the Durham Benedictine, Uhtred of Boldon. Professor Knowles comments that, unless the University monk remained to teach at Oxford, he could do little with his learning. It may be added that Cistercians who took higher degrees were rare; at the end of the fifteenth century it was reported to the general chapter at Cîteaux that some University monks went back to their monasteries puffed up with pride and claiming precedence after the abbot.

A chapter on monastic libraries covers the subject from the twelfth century until Leland's visits shortly before the dissolution, and is an interesting analysis from a study of catalogues which have escaped destruction. The latest catalogue to be printed is that of the library of the Augustinian canons of Leicester on which Professor Hamilton Thompson wrote a long and illuminating commentary in *The Abbey of St. Mary of the Meadows*. Libraries were book stores for which separate buildings were not found before the early fifteenth century; even then they were not primarily destined to be places of study for the monks who read in the carrels of the cloister and wrote in the scriptorium. In a just appreciation of the influence of monks as patrons of architecture, Professor Knowles has sketched the story of building at Ely when Alan of Walsingham was sacrist and prior, and of building at Gloucester. In the history of Gloucester, compiled early in the fifteenth century from account rolls which have perished, it is stated that the cost of the work in the choir and transepts was defrayed out of offerings from crowds who came to visit the tomb of Edward II, murdered at Berkeley Castle. The tomb was not designated a shrine by the monastic historian, and it is significant that miraculous cures were not mentioned, a contrast with Pontefract at the tomb of Thomas of Lancaster, Edward II's opponent. Professor Knowles has told the interesting story of the foundation of the Bridgettine house of Syon, a project of Henry IV and an achievement of Henry V, who asked the abbess of Vadstena to send nuns from Sweden. A fresh detail is that when the four nuns were on the North Sea in the spring of 1415 they made a vow to visit the tomb of St. Thomas of Canterbury; two years later they sought and secured a dispensation from fulfilling it.¹ The Dorset parish of Whitchurch Canonorum had no monastic association as suggested on p. 358; it took its second name in the thirteenth century when the great tithes were appropriated in equal portions by the canons of the secular cathedrals of Salisbury and Wells.

ROSE GRAHAM

¹ *Register of Archbishop Chichele*, ed. E. F. Jacob, iv, 167.

Map of Monastic Britain (North Sheet), Ordnance Survey. 2nd Edn. Text and Index, pp. 18+ folding map, 1:625,000. Printed and published by the Director-General of the Ordnance Survey, Chessington, Surrey, 1955. 9s.

The first edition of this map appeared in 1950, and the revision of the southern sheet a year or two ago. Like its companion, the northern sheet has been improved in several respects: a red plate has been introduced in order to show clearly the names and boundaries of dioceses and deaneries; there are some modifications of type, and besides minor revisions and corrections almost all non-conventual establishments (granges, hermitages, and chantries) have been omitted, together with a number of sites of unproved authenticity. This has eliminated practically all entries north and west of the 'Highland line', and the limiting dates (1066-1547) rule out all primitive Celtic foundations save for the few that survived as houses of culdees into the twelfth century.

The map is, like its fellow, basically the work of Mr. R. N. Hadcock, but he has been greatly assisted by Dr. D. E. Easson (who is compiling a handlist of Scottish religious houses) and other Scottish medievalists. The new indications of the (often very complicated) interlocking of dioceses, deaneries, and peculiars on the east coast are a notable addition to our knowledge of medieval conditions in these parts. Besides greater accuracy and clarity the new map has two valuable additions. The one is a separate index; the other is an introductory sketch (with useful bibliography) of the character and course of Scottish monasticism (pp. 5-15) by Dr. Easson. This, within its necessarily narrow limits, is authoritative.

M. D. KNOWLES

Map of Monastic Britain (South Sheet), Ordnance Survey. 2nd Edn. Text and Index, pp. 26+ folding map, 1:625,000. Printed and published by the Director-General of the Ordnance Survey, Chessington, Surrey, 1954. 9s.

The mapping and listing of medieval religious houses in this country has gained notably in precision during the past fifteen years, and this gain has in large part been due to the work of our Fellow, Mr. R. Neville Hadcock, who not only compiled the information for the *Ordnance Survey Maps of Monastic Britain* but also collaborated with our Fellow, Professor Knowles, to produce the second and much-extended list of *Medieval Religious Houses*. The appearance of the second edition of the South Sheet is proof, if any were needed, of its value.

As was to be expected, this edition gains by improved presentation and by corrections of detail, rather than by any drastic alteration in the basic information that it provides. The background colours of the map have been strengthened with good effect, and a two-colour overprint now enables non-conventual cells, abortive foundations, granges, and other minor establishments to be readily distinguished from their more important fellows. Amongst the amendments, those Celtic houses in the west that outlived the Conquest have been added, the legend has been extended to distinguish between houses that were in existence in 1500 and those that had moved or become extinct before that date, and the attempt to show more than a few of the most important granges—a subject better dealt with regionally and on larger-scale maps—has wisely been abandoned.

It is possible to pick out individual sites and to criticise their symbols as doing less than justice to the complexity of their history, but it is difficult to see how things could have been made plainer than they are without overburdening the legend. For instance, separate symbols are given for Linton and Isleham in Cambridgeshire, whereas land and a non-conventual church at each of these places together formed a single alien priory dependent on St. Jacut-de-la-Mer. Should one have ignored Linton, or should one have ignored Isleham to avoid creating the impression that they were separate cells, bearing in mind the fact that they are eighteen miles apart and cannot

be covered by a single symbol on a map? Cartography has its limitations as a means of recording historical information, and to make the best use of the map these limitations must be accepted, nor must they blind us to the fact that this is incomparably the most comprehensive and accurate publication of its kind within the whole field of European monastic studies.

R. GILYARD-BEER

The English Almshouse. By WALTER H. GODFREY. 10 x 7. Pp. 96 + 48 pp. plates and 60 figures and plans in text. London; Faber & Faber, 1955. 36s.

Mr. Godfrey has for a long time made a special study of the Medieval Hospitals and later Almshouses of this country. Many who have heard him lecture on such places at meetings of the Royal Archaeological Institute (as at Wells, Northampton, Stamford, Rothwell, Blackheath, and elsewhere) have wished that his great knowledge and experience of the subject could be made known to a wider public.

This book now fulfils that wish, to a large extent, and is accordingly most welcome. Mr. Godfrey himself would be the first to admit that he has been able to use only a fraction of the enormous body of material he has accumulated, and there are therefore some places and aspects of the subject omitted that one would like to have seen dealt with. That is perhaps being ultra-critical, for Mr. Godfrey's range is a very wide one, including as it does superb royal foundations like Chelsea and Greenwich as well as humble institutions like the Drake Almshouses at Amersham for only six old people, or the Derby Almshouses at Harefield which only accommodated one or two more. Medieval Hospitals, both here and on the Continent, from the earliest times are dealt with, such as St. Bartholomew's at Smithfield, founded in 1123, and St. Mary's at Chichester; and abroad we have Lübeck, Beaune, Tonnère, and others. The account is carried right up to 1750 with the Wandesford Almshouses at Bootham, York, designed by John Carr.

Mr. Godfrey's approach is a purely architectural one, with emphasis on planning. He thus avoids the danger of the 'romantic' or 'picturesque' treatment which sometimes mars other books on the subject, like Sidney Heath's *Old English Houses of Alms*, though he is fully appreciative of the aesthetic appeal of many buildings. Nevertheless, one would have welcomed some mention of the many ancient customs associated with some of the examples he deals with, and the costume still worn by some Almspeople. One thinks of Browne's Hospital, Stamford, St. Cross at Winchester, or Castle Rising. Or of the four poor women of Sir John Kederminster's Almshouses at Langley Marish, one of whom had to 'attend within the door of the parish Library founded by Sir John, during the whole time that any person be there for the purpose of consulting the books'. The key was attached to her girdle by a chain, and was otherwise kept in a chest under their four keys; and if it was lost, the cost of replacement was deducted from their weekly allowance.

One would perhaps have expected a mention of St. Bartholomew's Hospital at Sandwich, which retains its central thirteenth-century chapel with founder's tomb; or St. Margaret's Leper Hospital at Wimborne; or that Lyddington (a conversion admittedly) or Rothwell would have been more extensively dealt with. On the other hand, many most interesting or unusual examples are discussed and illustrated that most people will surely never even have heard of—at Stourbridge; the Great Hospital at Norwich; Glastonbury; Froxfield; Trinity Hospital, Salisbury; Kirk-leatham or Beamsley.

Mr. Godfrey traces the changing sociological conditions which caused the foundation of hospital and almshouse, and the consequent alterations in planning, from the Infirmary Hall with chapel under one roof of the Middle Ages to the courtyard or 'cottage' range plan of post-Reformation and later times.

Not the least admirable feature of this book is the wealth of illustrations. Of a series of 60

figures in the text, over 20 are from Mr. Godfrey's own plans or elevations, and the 48 photographic plates are a splendid and representative set. No student of Social history, and no one who values the English genius in the past for fitting the best building to its place and purpose, can afford to be without this book.

E. C. ROUSE

The Illustration of the Heavenly Ladder of John Climacus. By JOHN RUPERT MARTIN. 11 $\frac{3}{4}$ × 8 $\frac{1}{2}$. Pp. viii + 198 with 112 plates. Princeton: University Press (London: Geoffrey Cumberlege), 1954. 200s.

The Heavenly Ladder, a textbook of the ascetic discipline, was written by St. John, Abbot of Mount Sinai, probably about the close of the sixth century. It became the most widely studied of the Greek ascetic writings and passages are still prescribed by the Orthodox Church for reading during Lent. A rich cycle of illustrations was evolved during the eleventh century, with a series of pictures covering each of the thirty rungs of the ladder. The present work is primarily concerned with one of the earliest examples, a manuscript, now at Princeton, with a colophon dated 1081. Six other related manuscripts are also described and illustrated. A final chapter discusses the cycle as an expression of the contemporary movement in Byzantine monasticism. There is also an exhaustive catalogue of illustrated manuscripts of the Heavenly Ladder including those with only one or two pictures.

C. A. R. RADFORD

The Church of St. Bertelin at Stafford and its Cross. Edited by ADRIAN OSWALD, F.S.A. 9 $\frac{1}{8}$ × 7 $\frac{1}{2}$. Pp. 60. City of Birmingham Museum and Art Gallery, n.d. 4s. 6d.

Opportunity to excavate in burial grounds crowded with early and late burials does not often occur. In this case it came when the local authority decided to lay out the site as a Garden of Remembrance and it was taken by the Old Stafford Society. The excavation was carried out in July 1954 under the direction of Mr. Oswald.

The report is a very complete and well-illustrated record of the results of the work, admirably presented in seven sections with two appendixes. The foundations of an eleventh-century nave-and-chancel church, added to at later periods (thirteenth-fifteenth century) were revealed and—perhaps more important—a wooden cross buried almost centrally in the nave. This object was of plank-like, short-armed form and had been set up originally in a timber enclosure. That it marked a Saxon *locus*—a place consecrated for services and burials—is convincingly argued by Mr. Ralegh Radford. It seems clear also that it was later enclosed within a timber-built church of small size. A very large quantity of floor tiles of fourteenth- and fifteenth-century dates was recovered. They are of printed, line-impressed and a combined process types and of forty-five differing designs, five not represented elsewhere and about a score hitherto unpublished. Apparently all are of Staffordshire origin. This valuable section is the longest in the book.

A number of jettons of German manufacture and datable to 1550–1610 were found as well as a farthing of Ethelraed II and a few metal objects. Of these the bronze clip or brooch (apparently enlarged in illustration to over three times its natural size) looks more like a hook escutcheon from a sanctuary lamp of the hanging-bowl type than a dress fastening.

H. G. LEASK

Les Maîtres de l'ancienne peinture Serbe. Par SVETOZAR RADOJČIĆ. 11 × 8. Pp. 135 + 59 figures in the text and 62 plates, 6 being in colour. Belgrade, 1955; being No. T. CCXXXVI and Monograph No. 3 of the Archaeological Institute of the Serbian Academy of Sciences, Edited by V. R. PETKOVIĆ.

This handsome work, in Serbian, has, fortunately for the average English reader, a summary

in French, on somewhat similar lines to the book on Hungarian painting reviewed elsewhere in this issue of the Journal.

But here the scope of the book is somewhat different in that it is concerned more particularly with the work of individual artists, and outstanding examples; and ikons and manuscript paintings are included. The same wide period of time is covered from the twelfth and thirteenth centuries up to the seventeenth. The copyist qualities of the minor masters are noted; and the influence of political or national events in the trends of Serbian painting are discussed. Masters of painting in Montenegro, Herzegovina, and Macedonia are considered; and in almost all, the Eastern or Byzantine element is of course predominant.

The heads of Apostles or Patriarchs at Studencia, c. 1209 and at Mileševa c. 1234-5, and the Virgin at the latter place, are dignified and impressive, and even in this Serbian style one notes the same heavy use of white and the exaggerated outlining of the features that appears in France in early work. The use of a green underpainting for the flesh tints also is of interest (Colour Plate B). As one noticed in the Yugoslavian paintings, and as is, of course, the case with Greek ikons, the Byzantine manner persists well into what for us is the Gothic period, as at Prizren, 1307, and a later series also at Studencia, c. 1313/14, and even later still.

It is a most valuable thing to have this careful analysis of the Serbian masters, many of whom are identifiable by actual signatures; and to have the close dating which appears to be possible in many cases.

Here, again, the illustrations are taken mainly from actual photographs of the originals. But the colour plates are from skilful and evocative copies, which clearly owe much to the French method of reproduction.

E. C. ROUSE

Les Peintures murales de la Hongrie du Moyen Âge. Par DENES RADOC SAY. 9½ × 6¾. Pp. 254 + 132 plates and a map. Budapest. 1954. \$6.80.

It seems that almost every country in Europe except England has a national sense of the importance of its wall paintings, and can publish well arranged, reasonably priced, and handle-able summaries of them. The present book deals with Hungarian wall paintings, and seems to be an admirable compilation, adequately documented and illustrated, but not extravagant. It could well form the model for what has been wanted in this country since 1883—in fact, an annotated and illustrated Keyser's List brought up to date.

The present review does not attempt to discuss the book academically, for most of it is in Hungarian. But with the aid of a précis in French and a fine range of plates one can gain a very good idea of painting trends at different dates in the various parts of the country, the influences at work, the type of subject-matter found, and the outstanding examples. One could hardly ask more.

The form of the book consists of an Introduction (4 pages); a general account of Hungarian wall painting in the recognized divisions of Romanesque, Gothic (two sections), and Renaissance (76 pages), followed by a summary in Slavonic characters and in French (18 pages), and an annotated alphabetical Gazetteer or Catalogue (136 pages). Then come admirably clear indexes and references, list of plates, and finally the plates themselves arranged chronologically, ending with a sketch map of the country showing the places dealt with. The illustrations are almost entirely photographs of the actual paintings *in situ*, so that one may make a true evaluation. The book is not over-well produced, by our standards, the paper being of poor quality, the binding of rather thin paper boards, and the type undistinguished. But these are minor matters compared with the great service the book renders.

It is interesting to see how much more Hungarian paintings have in common with France,

and perhaps Northern Italy, than with more Eastern or Northern counterparts. The subject-matter also as well as its treatment for the most part, is quite familiar to us here. St. George receives perhaps somewhat more prominence, and St. Margaret; and there are a few unfamiliar saints as at Lockenhaus. The Annunciation at Spišské Dravce, c. 1290, is of fine quality, and predominantly Eastern in character: but the life of St. Margaret at Sivetice, c. 1300, and that at Szalonna might equally well be found in an English village church. The Prophets and Sibyls, c. 1340, at Esztergom are not unlike the Westminster retable work: and it is interesting to find a series of Virtues at the same place, c. 1500; while the elaborate painted vault at Székelydála seems to echo similar work in Scandinavia. The book has the great merit of giving a complete cross-section of typical painting, not ignoring village work, and not over-emphasizing the outstanding examples.

E. C. ROUSE

The Victoria County History of Wiltshire. Vol. ii. Ed. by R. B. PUGH, M.A., F.S.A., and ELIZABETH CRITTALL, M.A. 12 x 8½. Pp. xviii + 246. Published for the University of London Institute of Historical Research by the Oxford University Press, London, 1955. 63s.

With the exception of seven pages on Anglo-Saxon Art contributed by Mr. L. Stone, the whole of this volume is the work of Professor R. R. Darlington. It consists of an article on Anglo-Saxon Wiltshire, which in the words of the general editor 'comprehends all aspects of Wiltshire civilization from the seventh century to the eleventh'; an introduction to the Wiltshire Domesday; a translation of its text; and an essay on the Geld Rolls, followed by their text, with a translation and very full commentary. Even for a scholar as much at home in the period as Professor Darlington, to have covered so much ground is indeed a notable feat.

When so much exact and detailed scholarship is presented to us by so unquestionably competent a hand, it may seem churlish to complain that we are not offered more. The Victoria County Histories have long had their fixed pattern, and that they should enlarge it is perhaps too much to expect. Nevertheless the reader of the Domesday introduction may be excused for feeling that he has been offered a cheque drawn on an as yet non-existent bank, when he finds that 'comment on such matters as will receive full treatment in the appropriate volume of Professor H. C. Darby's *Domesday Geography* has been reduced to a minimum'. It has in fact been reduced to fewer than nineteen out of seventy-one pages. All the rest are given up to an exhaustive discussion of the Domesday landholders: a topic to which the Victoria Histories regularly do full justice.

In his remarks upon the *servi*, Professor Darlington rightly equates them with the slaves or *theowas* of the Old English laws (p. 54); but in the Domesday translation they appear as 'serfs', a mistranslation which has unfortunately become habitual in the Victoria Histories.

The chapter on Anglo-Saxon Wiltshire is characterized by an impeccable orthodoxy. Its author evidently feels no misgiving about the interpretation of Old English social history which is derived ultimately from Maitland and Vinogradoff. The gradual depression of a free peasantry is represented as a fundamental feature of the process. Hence, for Professor Darlington, *ceorl* is always synonymous with 'free peasant' (p. 14), and the *gebur* is, at least by origin, personally free (p. 54), though even Vinogradoff was constrained to admit (*Growth of the Manor*, p. 340) that these terms included both free and unfree peasants.

In discussing the problem of continuity between Roman-British and Saxon Wiltshire, and the references in pre-Norman charters to open-field agriculture, Professor Darlington consistently shies away from topographical evidence (pp. 10, 13). His articles might have been written by a scholar who had never set foot in Wiltshire. If we ask how far this volume, with all its wealth of learning, reflects the advance in local history which has characterized the last twenty years or so, the answer must regretfully be: little, if at all.

H. P. R. FINBERG

Jewels and Plate of Queen Elizabeth I. The Inventory of 1574, edited from Harley MS. 1650 and Stowe MS. 555. By A. JEFFERIES COLLINS. 9 $\frac{3}{4}$ x 7 $\frac{1}{4}$. Pp. viii + 599. Published by the Trustees of the British Museum, 1955. £5. 5s.

Of recent years too little study has been given to inventories in England. Just as the undergraduate reading history studies charters and documents, so the student of archaeology and the history of art should study bills, wills, and inventories, that alone can give him the measure and style of the destroyed riches of the historic age of his country. The publication of this splendid book by the Trustees of the British Museum raises hopes that the current neglect of such documents is coming to an end.

The volume is of particular interest to the Society of Antiquaries; our MS. 129, still unpublished, one of two copies of the post-mortem inventory of the plate of Henry VIII drawn up in 1550, forms a part of the comparative material used by the Editor.

Let it be said at once that he has done his work admirably. His account of the way the Jewel House books were kept adds a valuable chapter to Tudor administrative history, as his study of the accumulation of its treasures does to Tudor finance. The investigation of the individual items adds much to the history of English goldsmiths' work in general, as it does in detail to that of the regalia, of Holbein's work in previous metal and of such specific vessels as salts and cups. Jewels appear in the title of the book, as in the title of the inventory, but in fact nothing worn upon the person figures in it apart from the regalia, the insignia of the Garter, and a few gold collars bought as presents to ambassadors.

The hey-day of the Royal Jewel House was in the time of Henry VIII. Its treasures were enormously diminished by religious iconoclasm in the reign of his son, remained almost static under Queen Mary, and were once more enriched (though never to the former level) under Elizabeth, by gift, bequest, purchase, and confiscation. James I characteristically preferred to receive his gifts in cash; by his time, indeed, the melancholy story of the dispersal of the contents of the Jewel House, culminating in the tragedy of sale by the Commonwealth, may be said to have begun. So complete was that dispersal that not one of its treasures is known to have remained in England; Mr. Collins's researches in Denmark, Russia, and Spain have yielded none of the plate drawn from the Jewel House that was given to their sovereigns and representatives, and of all the 1605 items in the inventory only a single cup—the medieval French gold vessel known as the Royal Cup—survives; that passed to Spain, and was eventually acquired by the British Museum in the time of Sir Wollaston Franks.

For this reason it is natural that the volume should be rather scantily illustrated; the plates of documents are satisfactory but those of objects disappointing.¹ An astonishing fact is that there is no index even of proper names; possibly the Trustees wished to ensure that every historian should have read the book right through.

The care which has been taken to relate the items with those in other inventories is exemplary. There are, however, a few criticisms to be made of the interpretation of words used in their description. 'Antique' does not mean 'grotesque' (No. 7) but 'classical': 'antique boys' are putti, and 'antiques' scrolling rinceaux and less often (e.g. No. 107) cameos. 'Rabaske' (e.g. No. 562) stands for 'arabesque'; and 'damaskin' (Nos. 904 and 1031) for the moresque style in which Holbein occasionally designed, and for which engraved patterns were published in England as early as 1543.² Lord Salisbury's cup, referred to under No. 65, is far more likely to have come out of the English Jewel House than out of Benvenuto Cellini's workshop.

¹ Is it not time that the proportions of the Royal Cup were restored by the removal of the two intrusive sections in the stem? They could form parallel exhibits of documentary rather than historical

interest.

² See Campbell Dodgson in *Proc. Soc. Ants.* 1917 (28th June), p. 210.

Mr. Collins (under No. 290), seems rather to underrate the probability that such phrases as 'stricken with the letter L' indicate a hallmark. Sometimes the word 'stricken' or struck is undoubtedly used to mean stamped in a decorative sense, but more often it would seem to indicate a date-letter. Item No. 646, for example, records 'two pottes parcell guilt thone withowte touche' (i.e. not hallmarked), 'thother stricken with a smale S', and No. 658 'two pottes . . . the touche streken on ther feete'. It would naturally have been possible to extend the notes still farther; No. 838, with fleurs-de-lis and the initials L and C, reads like a gift from Louis XI and Charlotte of Savoy; and the Palmer Salt (No. 87) recalls the Huntsman Salt at All Souls.

Mr. Collins ends the introductory half of his book with a chapter on the materials for the study of the royal plate in the Tudor period. Most of the documents he lists are unpublished, and all his readers will hope that in his retirement he may find time to do further work upon the subject.

JOAN EVANS

The First Cambridge Press in its European Setting. By E. P. GOLDSCHMIDT. (The Sandars Lectures 1953.) 10½ × 7½. Pp. x+100, 2 pls.+11 figs. Cambridge: at the University Press, 1955. £1. 1s.

The late Mr. E. P. Goldschmidt was nothing if not a racy and stimulating bibliophile, and his lectures on the Sandars Foundation run true to form. In the first he discusses the background of John Siberch's ten books, the motives that led to his press being set up, and the reasons for its short life (Feb. 1521-Dec. 1522): relying chiefly on patrons who wanted to see their own work in print, such an enterprise could not hope to flourish in a university town, far away from the beaten track of commerce. Yet Siberch can claim to be the first printer of Greek in England, and Mr. Goldschmidt goes on to explore this consuming passion for Greek authors—valued not so much for their style, he thinks, as for scientific knowledge, ethics, and the maxims of sound government. So fortified, the continental humanists with Erasmus at their head began to search the Scriptures; theologians sprang to arms, scenting heresy left, right, and centre among the Grecians, and Europe witnessed a battle of pamphlets that was soon to be continued on a Lutheran scale. Finally, Mr. Goldschmidt follows typographical clues from Cambridge to Leipzig and Cracow, and then turns to survey the scholar-printers as a class: 'Aldus, Badius, Thierry Martens and Froben are the men who really accomplished what John Siberch so feebly attempted against impossible odds'.

No short review can do justice to a book that breaks new ground in a string of pithy sentences. These lectures are lectures in the right sense of the word—meant to tickle and provoke, not making too much parade of minute scholarship. For all that, they are full of curious information that historians will find hard to get anywhere else.

K. P. HARRISON

Catalogue of Cambridge Portraits. By J. W. GOODISON, M.A., F.S.A. 9½ × 6. Pp. xxviii+212 +pls. 32. Cambridge University Press, 1955. 63s.

The catalogue includes all the portraits, whether paintings, sculpture, or drawings, but excluding miniatures, belonging to the University of Cambridge. Portraits in the Fitzwilliam Museum which are of persons in no way connected with the University are also excluded. Catalogues of the portraits in the Colleges are to follow.

The volume is most appropriately dedicated to the memory of our fellow, Sir Henry Hake, C.B.E., Director of the National Portrait Gallery, 1927-51, and himself a Cambridge man. Hake could be relied on to give good advice on what was essential and was a believer in brevity. Many have benefited from what he had to say on cataloguing portraits.

Here we have a clear and concise statement of facts. Three hundred and eighty-seven portraits

are catalogued in a type of a size comfortable to read. There are good descriptions. The biographical notes refer chiefly to the sitters' academic careers and university appointments. So little use is made of initials and shortened titles that the reader is pleasantly surprised at the ease with which it may be consulted. The footnotes are given after each entry and are rarely more than a bare reference to sources. There is one comprehensive index of sitters, artists (including former attributions), donors, and previous owners. In this both the page and catalogue number are given.

Mr. Goodison has made thorough and rewarding searches through numerous manuscripts and printed records. Only in rare cases has he failed to find some account of a portrait's acquisition. When this has not been found he has noted the earliest mention of it. A surprising number of cataloguers of the past have failed to do this. It was a happy thought of his, and a most useful one, to record, when known, the views of contemporaries on the likeness of portraits to the sitters.

Seventy-seven portraits, including 16 pieces of sculpture, are reproduced in half-tone. These are in approximate chronological order. Statues and whole-length paintings are allotted whole pages and in general head and shoulder paintings and sculptured busts are reproduced four to a page. Thus the scale of reduction is not very widely different and features are reasonably clearly seen.

C. K. ADAMS

The Daniells, Artists and Travellers. By THOMAS SUTTON, F.S.A. 10 x 7½. Pp. 200 + pls. 31 including 7 in colour. London, The Bodley Head, 1954. £4. 4s.

Colonel Sutton here records from manuscript and contemporary printed sources the travels of Thomas Daniell, R.A., F.S.A., 1749-1840, and of his nephews, William Daniell, R.A., 1769-1837, and Samuel Daniell, 1775-1811, noting exactly in some cases and approximately in others when they visited the many places of which they made drawings, paintings, and aquatints. Most of Thomas's and William's drawings were done in India and in the British Isles, but on their way to India they visited and made a few drawings in South Africa, Java, and China. Samuel spent most of his short working life in Africa and Ceylon.

Thomas and William left England in 1783. They reached India in 1786 and were there until 1794. During that period they made three long tours, making many drawings and a few paintings of notable buildings and ruins, as well as natural scenery. They made use of these for their great publication *Oriental Scenery* which came out in parts between 1795 and 1808. The *Antiquities of India* in this series, published in two parts in 1800 and 1808, was dedicated to our Society of which Thomas was elected a fellow in 1799.

William Daniell's other most important publication was his *Voyage Round Great Britain*, a series of 308 coloured aquatints published between 1814 and 1820. He is also remembered for his 156 soft ground etchings of pencil portraits of notabilities by George Dance. A list of these with dates of publication is given in an appendix.

The appendixes, which are by Mr. J. G. Garratt, occupy forty pages, and are devoted to lists of the engravings made by all three Daniells, to references to records of their original paintings and drawings, and to a list of known portraits of them.

C. K. ADAMS

The Life and Work of James Gibbs 1682-1754. By BRYAN LITTLE. 8½ x 6. Pp. xiv + 210. London: Batsford, 1955. 25s.

The majority of seventeenth- and eighteenth-century English architects can be neatly classified as leaders or members of a definite school. James Gibbs, however, occupies an unusual position

in that he is an isolated figure who worked alone, but who at the same time formed a link uniting the small band of baroque architects to the more numerous Burlingtonians. He had the inestimable advantage of having spent several years in Rome as a pupil of Carlo Fontana, from whom he acquired a grasp of the baroque style which is exemplified in his first important work in this country, the church of St. Mary-le-Strand. But he imbibed something further than a knowledge of baroque during those important early years: he absorbed the lavish spirit of Italian architecture and a love of rich interior decoration which those of his contemporaries who had only studied in England seldom shared. He retained this taste for generous ornament in plaster, wood, or marble throughout his life, although his architectural style veered slowly but consistently away from the baroque towards the purer tenets of Palladio. Yet, though he found himself in close sympathy with the Burlingtonian school, he remained apart; and there may be evidence of disappointment, or even pique, on the part of the great patron in the fact that Lord Burlington's name is not found amongst those of the distinguished cognoscenti and eminent architects who subscribed to Gibbs's famous *Book of Architecture*.

Mr. Bryan Little tackles his subject with great thoroughness, and writes of the various phases and commissions of Gibbs's life with a competence and lucidity well suited to an architect in whom these two qualities were outstanding. No very clear picture of Gibbs's personality can emerge since few details of his life, apart from his work, are known. There was no Robert Hook, no dutiful son, to leave a record which would illuminate his character and way of living. The lack of the personal element inevitably makes the story rather severe, so that the book becomes more a textbook than one for general reading. It is admirably produced, and is informatively illustrated from drawings and photographs.

RALPH DUTTON

Michael Rysbrack, Sculptor. By M. I. WEBB. 9 $\frac{3}{4}$ x 7 $\frac{1}{4}$. Pp. 241 + pls. 91. London: Country Life, 1954. 42s.

Mrs. Webb's excellently produced and illustrated study of Rysbrack, whom Vertue described as 'among the most Ingenious Artists now living' and Walpole, with rather less than flattery, called 'the best sculptor who has appeared in these Islands since Le Sueur', comes to fill an important gap in our knowledge of English art. When the late Mrs. Esdaile began her researches half a century ago, post-Renaissance sculpture in England was an almost completely unstudied field. Her enthusiasm has proved contagious. With the addition of Mrs. Webb's *Rysbrack* to Mrs. Esdaile's own book on Roubiliac, Mr. Faber's on Cibber and Mr. C. F. Bell's *Annals of Thomas Banks*, the main landmarks in the history of sculpture in England between the Restoration and the opening of the nineteenth century are well on the way to being charted. Scheemakers and Sir Henry Cheere (a former F.S.A.) are the only outstanding figures whose work remains to be studied.

By careful and extensive researches Mrs. Webb has been able to add very considerably to our knowledge of Rysbrack's life, and in her catalogue she assembles particulars of no less than 300 of his works in sculpture. Doubtless minor additions will be made from time to time as unpublished material is brought to light (Mr. Little's recent book on James Gibbs contains one such crumb of information) and as the contents of country houses and remote churches are more fully examined (the signed Sotheby-Willoughby monument in the church at Birdsall in Yorkshire is one which has escaped Mrs. Webb's notice). But for all this it is unlikely that the future will add very much to the materials for a portrait of the artist which she has assembled. It is in the interpretation of her materials, however, that the reviewer must part company with Mrs. Webb. Both in architecture and painting English art remained somewhat apart from the main stream of European art during the eighteenth century. But in sculpture it was not so. Rysbrack,

Roubiliac, and Scheemakers were all foreigners (as Cibber had been before them) and the two outstanding English sculptors of the period, Banks and Flaxman, were far more deeply steeped in contemporary continental artistic theory (in fact, Roman neo-classicism) than any of the greater painters or architects of the period. The historian of English eighteenth-century sculpture *must* relate his subject to the background of contemporary continental art if its meaning is to be understood. In describing Rysbrack's art as 'classical' in contrast to Roubiliac's 'baroque' style, Mrs. Webb over-simplifies. Both are rococo artists, exponents in their quite different ways of the last phase of the baroque movement before it was dethroned by neo-classicism. A glance at the subtle changes which Rysbrack introduced into his adaptation of a classical relief as a wall decoration at Houghton makes that immediately clear. Rysbrack took this (as Mrs. Webb has discovered) from Montfaucon, but he has removed one-half of the symmetrically arranged architecture which appears in the background of the engraving of this Roman relief; the diagonal movements of the composition, hardly apparent at all in Montfaucon, have been strongly emphasized, and even the stiff flames on the classical altar have been given a rococo flicker. The truth is that Rysbrack's sculpture is hardly ever classical except in the very general sense that all post-Renaissance art can be so described.

Mrs. Webb has an interesting chapter on Rysbrack's teachers and predecessors in the Low Countries, but it is to be regretted that she did not devote more space to exploring in detail the immediate sources of Rysbrack's individual works in continental art. That his Marlborough tomb derives from Bernini has been pointed out by others and is no doubt due to Kent's hand in the design, for Kent has seen the tombs of Urbain VIII and Alexander VII in Rome. But it is less easy to account for Rysbrack's borrowings from French art, for he seems never to have visited Paris. Yet the design of his Foley monument at Great Witley seems closely connected with what was then one of the most celebrated Parisian monuments, the tomb of Michel le Tellier by Mazeline and Hurtelle at St. Gervais. Two more of Rysbrack's tombs seem to be based on Coysevox's Vaubrun monument, and it is impossible not to wonder whether the similarities between his Beaufort tomb of 1754 at Badminton and Pigalle's almost exactly contemporaneous monument to Maurice de Saxe (as originally planned) are entirely fortuitous. It seems likely that such links are, in the main, due to Rysbrack's familiarity with such continental prototypes of his sculptures in engravings. A case in point is the Kensington Palace relief of a Roman Marriage which Dr. Whinney has shown to be taken directly from an illustration in Pietro Santi Bartoli's *Admiranda Romanorum antiquitatum, &c.*, a book which seems to have been popular with eighteenth-century sculptors. Rysbrack is known to have possessed a large library which was dispersed in the sales after his death. It would have been well worth Mrs. Webb's while to have explored the question of what could have been available to the sculptor in the way of prints of this sort. Not only might it have thrown light on the sources of his art, but would probably have enabled her to define more clearly the precise nature of his particular brand of rococo art.

F. J. B. WATSON

Furniture-making in the 17th and 18th Century in England. By R. W. SYMONDS. 13 $\frac{1}{2}$ × 9 $\frac{1}{2}$. Pp. xii + 238. London: The Connoisseur, 1955. £8. 8s.

In examining this handsome volume, one or two points stand out which render it superior to any other book so far published on the subject.

Its typography and general get-up, apart from the matter contained in it, deserve special praise. Particular care has been paid to the photographing of each piece of furniture; and the individual reproduction of details of the pieces illustrated is one of the book's outstanding features.

Another is that, unlike most works on the subject where the furniture reproduced is from

sources well known to the majority of connoisseurs, each of the pieces here illustrated is from a private collection not generally known to the public; and the same applies to every one of those shown in the numerous articles on English furniture contributed by Mr. Symonds to papers such as the *Burlington Magazine*, the *Connoisseur*, and *Country Life* during the last thirty years.

He always has something to say that has not been said before. An example of his wide research into previously untapped sources was published in the *Connoisseur* in March 1944 under the title of 'New Light on the Coronation Chair'. This was one of his most important discoveries—a discovery which served as a solution to a problem which until then had always puzzled antiquaries, namely the date of the four lions at the base of the Coronation Chair. He found a bill in the Public Record Office showing that these lions were renewed by a carpenter named Richard Roberts at the time of the coronation of King George II in 1727.

An important discovery which is recorded in the present book, is that the turret clock at Brome Hall, Suffolk—illustrated by a number of photographs both of the clock itself and its superb mechanical apparatus—is the only one of its kind made by Thomas Tompion. The value of this discovery lies in the fact that it proves conclusively that the tradition of the turret clock in the stables at Ickwell Bury in Bedfordshire, having been made by Tompion, is false; for the clock in question, unlike that at Brome Hall, is an ordinary blacksmith's clock of the period, and is the work of the blacksmith in the village of Northill, where the house of Ickwell Bury is, and where stands the thatched cottage on the Green at Ickwell, now called Tompion Cottage, in which Thomas Tompion, the 'father of English clock-making' is said to have been born in 1639.

The sub-title of *Furniture-making in the 17th and 18th Century in England* is *An Outline for Collectors*; and one of its most illuminating chapters is that called 'The Ingenious Faker'.

The subject of the faking of furniture has always been one to which the author has paid special attention. A chapter was devoted to it in *The Present State of Old English Furniture*, published as far back as 1921, the first of the long series of books for which he has been responsible. It was again discussed in his next book in 1922, *Old English Walnut and Lacquer Furniture. Its present-day condition and value, and the methods of the furniture faker in producing spurious pieces*. Two years later he was called in by the Burlington Fine Arts Club to assist—so far as the furniture was concerned—in the production of the privately printed *Catalogue of a Collection of Counterparts, Imitations and Copies* exhibited at the Burlington Fine Arts Club in 1924.

The question of the faking of furniture, though it only forms a single chapter of this valuable book, is the one which many connoisseurs will find the most enthralling.

H. CLIFFORD SMITH

Britten's Old Clocks and Watches and their makers. Seventh Edition by G. H. BAILLIE, C.

CLUTTON, and C. A. ILBERT. 11 x 8½. Pp. xx + 518. London: E. & F. Spon Ltd., 1956. £7. 7s.

To anyone at all acquainted with antiquarian horology a book appearing under the names of Baillie and Ilbert needs no review, anything they put out is sure to be well worth getting. Cecil Clutton is a new-comer to horological literature and his pen seems to flow equally freely whether the subject be old organs, old crocks, or old clocks.

Britten was Secretary to the British Horological Institute for many years, and as such he had sent him all manner of interesting items. These he gathered together in book form, each succeeding addition embracing a wider field, until the last editions became a somewhat patchwork compilation. All blocks having been lost during the war, the present editors had to start afresh and have, for reasons of economy and practicability, confined themselves to examples that are the more likely to pass through the hands of collectors and dealers. This makes the book an

excellent guide to the collector of clocks and watches, but it is no longer 'Britten' whose aim was to cover the whole field. 'It's in Britten' became a cliché.

The book is just crammed with sound, reliable details of the evolution of clocks and watches both decoratively and mechanically. There are many first-class drawings by F. Janca which are all fully explained and this is an advance on the old Britten.

It is perhaps inevitable that a book that has been five years in preparation should be out of date in some respects before it is published. We now know that the fusee was well established some years before Leonardo's sketches; the latest work on the origin of the portable watch is ignored and, worst of all, Tompion is credited with the invention of the equation kidney. Here it is not a question of recent research but of faulty reasoning. Both Tompion and Williamson made clocks inscribed 'Inventit', but that was only in respect of the method of application of the equation kidney and not for the kidney itself, which should be credited to Huygens; only thus can we explain both Tompion and Quare producing their first equation clocks almost simultaneously. Now this wrong attribution will go down in history just as Hooke has wrongly been credited with the anchor escapement because fifty years after the event Sully wrote that 'he might have done it'. There are a glossary, biographical section, bibliography, and the combined Baillie and Britten lists of former clockmakers. These items make a great addition to the usefulness of the book as a work of reference.

H. ALAN LLOYD

Early Victorian Architecture in Britain. By HENRY-RUSSELL HITCHCOCK. Vol. 1. Text. 10½ × 7½. Pp. xxi + 635. Vol. 2. Illustrations. London: The Architectural Press, 1954. £7. 7s.

The decision of those responsible for the allocation of reviewing space at the Society of Antiquaries to ask for a review of Professor Hitchcock's book is proof of its success. Even ten years ago a book dealing with British buildings of between 1830 and 1850 would hardly have qualified for such treatment. On the other hand, Professor Hitchcock's text carries the triumphant justification of this change of policy, if such it can be called. Compared with his, Mr. Goodhart-Rendel's and Mr. Turner's volumes on Victorian architecture—the one stimulating, the other in its lack of sympathy and understanding merely irritating—are the work of amateurs. Professor Hitchcock speaks with the voice of the professional. Here for the first time in a book on nineteenth-century architecture the technique is used which medieval archaeology has invented and perfected. Those who look for the lives of architects will be disappointed. Even in the case of such a many-faceted character as Pugin's no anecdotes nor indeed any attempts at linking personality with style appear. What we are offered instead is what on the Continent was named 'anonymous history of art' or pure history of style. By means of careful analyses of buildings the various stylistic trends of these barely twenty years and their sequence are demonstrated in seventeen chapters and over six hundred pages. That may sound like over-doing a valuable and worth-while job; but there are few pages which the fellow scholar would want to be deleted.

The scheme of the book is straightforward. After the introduction follows a chapter on the eighteen-thirties, making it amply clear that Early Victorian carries on without a break from what is usually rather loosely called Regency—both on the Grecian and the romantic or Picturesque side. Chapters 3 to 5 deal with churches and chapels, chapters 6 and 7 with the palazzo style in secular architecture and its chief exponent Sir Charles Barry. After these follow chapters on manorial and castellated country houses, on royal and state patronage, on corporate commissions, commercial architecture, housing, railway stations, and other glass and iron structures culminating in the Crystal Palace, and finally an inconclusive conclusion on the situation of the Gothicists about 1850–5. This is called 'Ruskin or Butterfield?' It proves that Professor Hitchcock did not regard his job as done when after the writing of page 613 he put down his pen.

There is no break between Early and High Victorian, and even Late Victorian (beginning as it does with Philip Webb's houses of about 1860, the products of William Morris's firms of 'Fine Art Workmen in Painting, Carving, Furniture, and the Metals' from 1861 onwards, and Norman Shaw's houses from about 1872 onwards) overlaps High Victorian confusingly. So there will, it seems, be nothing left for Professor Hitchcock but to continue where this first monumental instalment leaves off. Several papers which he has published in the last few years point the way, and in some respects his comments on the High Victorian of 1850-70 may even be of greater or at least wider interest than those of the present book.

For, however competent, sympathetic, and some times ingenious his defence, Early Victorian is not on the whole an attractive style. The familiar tag 'debased' used in conjunction with Early Victorian classical or Italianate buildings and motifs indeed characterizes much of the innovations of about 1840; slackening tension in the compositions and in such details as the shapes and mouldings of windows; a mixture of elements from various epochs without the challenging flourish of the High Victorian or the sensitive selectiveness of Webb. However, on the Gothic side such outstanding achievements as the Houses of Parliament (thanks to Barry as much as to Pugin) and Pugin's church at Cheadle fall into Professor Hitchcock's years, and also the Crystal Palace which in the last twenty years has by others as well as Professor Hitchcock himself been sufficiently investigated to show its vast historical significance. Aesthetically Professor Hitchcock prefers that other monument in iron and glass, Bunning's Coal Exchange of 1846-9 in Lower Thames Street. This is truly one of his major discoveries. Minor discoveries are legion in a book which has more than 500 illustrations and discusses far more buildings than it illustrates. The discoveries are specially many in the field of commercial and domestic architecture. The big private mansions, the public buildings, and the semi-public buildings are naturally better known. As they include St. George's Hall in Liverpool, the Royal Exchange, the Fitzwilliam and the Ashmolean, Balmoral, Osborne, Harlaxton, Highclere and Trentham, Bridgewater and Dorchester Houses, the Travellers, the Reform and the Army and Navy Clubs, there is certainly no lack of achievement in the twenty years which Professor Hitchcock discusses. The chief trends are a turn of the Grecian mode towards a Baroque over-crowding of motifs, a turn from the Grecian to the Italian Renaissance, and a turn from the castellated to the Elizabethan. These trends have in common a desire for higher relief and a growing distaste for the discipline of the Grecian style. In this the Early Victorian paves the way for the High Victorian. In this also it follows a direction equally noticeable in France and Germany.

Neither of these countries, however, possesses a book on its architecture of the mid-nineteenth century that could even try to compete with Professor Hitchcock's. M. Louis Hauteccœur, whose monumental history of French architecture from 1500 onwards has now with its eighth volume reached 1848, is not a serious competitor; for M. Hauteccœur lacks the international evenness of information which Professor Hitchcock as an American possesses, and he also tends in the antiquated French archaeological tradition, to split up his material into categories which make stylistic judgement difficult. In fact he is not concerned with the same problem as Professor Hitchcock. M. Hauteccœur's aim is a register of facts and motifs—and for all its minor errors his *Architecture Classique* (a strange name to cover what he has to report of the nineteenth century) is indeed a vast and welcome register. But Professor Hitchcock aims at an understanding of a complex style which, as a style, has been considered far less than even such remote styles as those of the Sassanians or the Visigoths. Those who are sufficiently interested to study his book will emerge with a much widened and deepened appreciation of nineteenth-century aesthetics.

In this the numerous illustrations also help. The author and the publisher have chosen to show as many as possible of the buildings discussed in reproductions from contemporary prints. That adds period flavour no doubt, but if one of the intentions of the book is to establish the value of Early Victorian buildings in comparison with those of the preceding centuries, then photo-

graphs would have been a better choice. The print from *The Builder* tends to look quaint to us, and the last thing Professor Hitchcock wishes to convey is quaintness. The photograph establishes equality of judgement, and it is on this plane that St. George's Hall, the Houses of Parliament, the Reform Club, and Greek Thomson's churches and terraces ought to be considered. If presented in a visually adequate way they would in my opinion indeed stand up to the best of their date anywhere abroad and to a good deal of what is accepted as aesthetically valuable in the British eighteenth and seventeenth centuries.

NIKOLAUS PEVSNER

Photography for Archaeologists. By M. B. COOKSON. 7½ × 5. Pp. 132. London: Max Parrish, 1954. 15s.

Mr. Cookson has written a book for which there has long been a demand. Probably the majority of budding archaeologists are photographers in the sense of possessing a camera. But a photograph of the type which *should* illustrate an archaeological report, or even form part of the unpublished records of a dig, is a very different matter from a snapshot of a general view, often ill-composed and taken at the wrong time of day, or a photograph of the latest addition to the family circle, usually out of focus. The amateur operator has got to be translated into someone who can take a technically perfect photograph of subjects which are often difficult. Another conversion which may have to be made is that of a professional photographer into one who appreciates the particular needs of the archaeologist for whom he is working.

Mr. Cookson has not written, and does not claim to have written, a manual of photography, for, as he rightly says, such manuals exist. But he has perhaps erred too much in this restriction of his scope. Most people would agree that it is easier to remember things if one knows the reason. For instance, a rather less discursive treatment could have provided a tabulation of the effect of different filters (the chapter on filters is perhaps the weakest section of the book), could have given the reason why stopping down produces greater depth of focus, and explained why close-up photographs require increased exposures.

What he has written is a manual which deals with two main subjects: first, the preparation of archaeological subjects for photography and the difficulties in taking them, which are peculiar to this particular branch of photography, and second, the organization of the work under improvised conditions which are almost inevitable in all archaeological photography, whether in England or abroad. What he has to say on these subjects should be read with the greatest attention by every would-be archaeological photographer. He has had a lifetime of experience, and in this book he places his experience at the disposal of students in a clear and readable manner. Sections such as the organization and make-up of kit, the carrying out of developing and printing, the recording of details of the subject, are all excellent. It is in contrast with them that a slight woolliness in the treatment of the technique of taking a photograph referred to above seems less satisfactory.

The author has perhaps tried to be unnecessarily fair to all possible types of camera. It is perhaps because some of the worst horrors of miniature camera photographs in archaeological work have never come within his ken that he does not advise more strongly against them. It is perfectly true that a few, a very few, experts do produce good work. But in additions to the disadvantages he enumerates, such as those of immediate development, there are others, the shortness of focal length, the necessity of seeing enlarged prints to make sure that the negative is satisfactory, and perhaps above all the *easiness* with which a shot can be fired off. The result of this last is that views are taken of inadequately prepared subjects, the view does not cover the subject properly, the scale is not correctly aligned, and many similar faults creep in. If a miniature camera must be used, it should always be used from a tripod, so that the view can be properly

studied. But even so, it is not so satisfactory as a camera with which the photographer can view the subject through a ground-glass screen.

On a few minor points, the reviewer would also disagree with Mr. Cookson. He rightly emphasizes the liability of falsification of evidence by touching-up a negative, but this also applies to some aspects of touching-up the subject itself. In a soil section, different layers can safely be emphasized by accentuating the texture of the soils. But if the junction of two layers is indicated by undercutting, the record becomes that of what the person who did it saw, and not of what was there. It should therefore be used with the greatest caution. Secondly, in more than one place, he gives the impression that progress pictures might be taken somewhat haphazardly, for instance in progress photographs of uncovering a mosaic. Few digs can afford haphazard firing-off of shots, and no photograph should be taken which has not a definite purpose, and on the instructions of the archaeologist responsible.

These reservations do not affect the great value of the book, which should be in the hands of every archaeological organization active in the field. If it is, perhaps we shall see fewer of the completely uninformative and unpleasing photographs which mar all too many archaeological reports.

K. M. KENYON

PERIODICAL LITERATURE

PROC. BRIT. ACADEMY, vol. 40, 1954:—The personal role of Simon de Montfort in the period of Baronial reform and rebellion, 1258–65, by R. F. Treharne; The language of the Pastons, by N. Davis; Who are the Welsh?, by G. E. Daniel; The Codex, by C. H. Roberts.

ANATOLIAN STUDIES, vol. 5, 1955:—Summary of archaeological work in Turkey, 1954; Early-Christian epitaphs from Phrygia, by W. M. Calder; Beycesultan excavations: first preliminary report, by S. Lloyd and J. Mellaart; The Sultantepe tablets (*cont.*), by O. R. Gurney; Some recent finds at Alahan (Koja Kaleşi), by M. Gough.

ARCH. JOURN., 111, 1954:—The excavation of a cist-grave cemetery and associated structures near Hughtown, St. Mary's, Isle of Scilly, 1949–50, by P. Ashbee; British camps with timber-laced ramparts, by M. A. Cotton; The Roman aqueduct at Lincoln, by F. H. Thompson; Hereford Cathedral: The Bishop's Chapel of St. Katherine and St. Mary Magdalene, by N. Drinkwater; Cufic lettering in Christian art, by S. D. T. Spittle; The date of Clifford's Tower, York, by A. J. Taylor; The Blithfield sallet, by C. Blair; A statue of Christ from the ruins of Mercers' Hall, by J. Evans and N. Cook; The south front of Wilton House, by H. M. Colvin.

JOURN. R.I.B.A., 3rd ser., vol. 62, no. 12:—Historical aspects of the Vitruvian tradition in town planning, by H. Rosenau.

JOURN. R. ANTHROP. INST., vol. 84, pts. 1 & 2:—Excavations at Jericho, by K. M. Kenyon; Neanderthals and Praesapiens, by H. V. Vallois.

ARCHIVES, vol. 2, no. 14:—Architectural history and its records, by H. M. Colvin; Local archives of Great Britain. 12. Guildhall Library, by A. E. J. Hollaender; Record publications of Societies, by J. C. Lancaster; A bibliography of the writings of Sir Hilary Jenkinson, by R. Ellis and W. Kellaway.

COAT OF ARMS, vol. 3, no. 23:—Family heraldry in H.M. Ships' badges, by J. H. B. Bedells; The arms of the venerable English college at Rome, by J. A. Goodall; A letter by Joseph Hawker, Richmond Herald, by F. W. Steer; Heraldic book plates, by B. C. Trappes-Lomax; Minor Monsters, by H. S. London; Effigies on Inchmahome, by J. A. Stewart; The arms on the tomb of William de Valence in Westminster Abbey, by V. K. Ostoia; Flags of the Channel Islands, by H. G. Carr; The Halifax family pedigree, by R. Bretton.

No. 24:—The titles and styles of 'Royal Highness' and 'Prince' and 'Princess', by V. Heywood; Family heraldry in H.M. Ships' badges (*cont.*), by J. H. B. Bedells; 'Service Heraldry': a reminiscence and a coincidence, by C. W. Scott-Giles; Heraldic book plates (*cont.*), by B. C. Trappes-Lomax; Civic arms, by R. Bretton; The arms of Stratford-upon-Avon, by W. T. Collins; Indian heraldry, by H. B. Pereira; The silver greyhound of the Queen's Messengers, by H. S. London.

JOURN. SOC. ARMY HIST. RES., vol. 33, no. 134:—Private of the 10th Hussars, c. 1832, by W. Y. Carman; The short life and sudden death of an English Regiment of Foot, by T. H. McGuffie; The Royalist army at Edgehill, by P. Young; Sir Thomas Hyde Page, Engineer, by W. Y. Carman; British military smoothbore fire-arms, by R. Scurfield; A cavalry regiment of the Mahratta wars, by C. T. Atkinson.

No. 135:—A drummer of the Coldstream Guards, c. 1851, by W. Y. Carman; Kelly of Waterloo, by T. H. McGuffie; British military smoothbore firearms (*cont.*), by R. Scurfield; Wellington's officers in the D.N.B., by M. I. Fry and G. Davies; Some artillery badges, by P. E. Abbott.

JOURN. ROY. ASIATIC SOC., pts. 3–4, 1955:—The East India Company's education of its own servants, by J. Bowen; Turkish ghost words, by G. Clauson; The Ethiopic inscription from Egypt, by E. Ullendorff.

ANNUAL REPORT OF BRITISH SCHOOL OF ARCH. AT ATHENS, 1953–4:—Archaeology in Greece, 1954, by M. S. F. Hood; British excavations at Chios, by M. S. F. Hood and J. Boardman; British excavations at Mycenae, 1954, by A. J. B. Wace; Archaeology in Cyprus, 1954, by A. H. S. Megaw.

BURLINGTON MAG., October 1955:—An 18th-century drawing of the Grand-Ducal Crown of Tuscany, by J. F. Hayward.

November 1955:—Some further medieval English alabaster images of the Virgin and Child, by W. L. Hildburgh.

CONNOISSEUR, October 1955:—Furniture at Firle Place, home of Viscount and Viscountess Gage, by F. J. B. Watson; The 'Mercury Gallant' or European fashions in the 1670's, by J. L. Nevins; Longton Hall factory site, by B. Watney; A disputed pewter tankard, by J. Hayward; International heraldry, by C. R. Beard.

November 1955:—An unpublished Romanesque crucifix, by H. Honour; Restoration of frescoes in Rome and Assisi, by G. Urbani; Eighteenth-century Venetian lacquered furniture, by G. Mariacher; Italian arms and armour in the Marzoli Collection, Brescia, by J. M. Wearing.

December 1955:—English furniture at Plas Newydd, Anglesey, home of the Marquess of Anglesey, by R. Edwards; A microscope by Alexis Magny, by E. Neumann; Constable's 'Whitehall Stairs' or 'The opening of Waterloo Bridge', by D. Sutton; The Hennells identified, by P. Hennell.

FOLK-LORE, vol. 66, June 1955:—Folklore in history, by M. A. Murray.

September 1955:—Omens—ancient and modern, by S. H. Hooke.

THE GENEALOGISTS' MAG., vol. 12, no. 3:—Juliana Coningsby and her kinsmen; a group of Cavalier cousins, by S. W. Rawlins; Sir James Earle, Kt., and Dr. Percivall Pott, by W. H. Challen; Some early emigrants to America: abstracted by C. D. P. Nicholson.

No. 4:—The Jacobite heir: the descent of Crown Prince Rupprecht of Bavaria, by P. M. Thomas; The New England visit of William Edmondson, the Quaker, by G. A. Moriarty; Some early emigrants to America, by C. D. P. Nicholson; Sir James Earle, Kt., and Dr. Percivall Pott, by W. H. Challen.

ENG. HIST. REV., vol. 70, no. 275:—The 'Original Returns' and Domesday Book, by P. H. Sawyer; Loans to the English Crown, 1328–31, by E. B. Fryde; The returns of the Inquisitions of Depopulation, by E. Kerridge.

No. 276:—Royal castle building in England, 1154–1216, by R. A. Brown; Some aspects of English trade with the Levant in the sixteenth century, by T. S. Willan.

No. 277:—Gesiths and Thegns in Anglo-Saxon England from the 7th to the 10th century, by H. R. Loyn; William Airmyn and the Bishopric of Norwich, by J. L. Grassi; Notes on the Coronation records of the 14th century, by B. Wilkinson.

TRANS. ROYAL HIST. SOC., 5th ser., vol. 5:—The King's prisons before 1250, by R. B. Pugh; East Anglia and the Danelaw, by R. H. C. Davis; North Africa and Europe in the early Middle Ages, by W. H. C. Frend; The re-establishment of the Church of England, 1660–1663, by A. Whiteman.

HISTORY, vol. 39, no. 137:—The Anglo-Saxon writ, by G. Barraclough; King or Minister?: the man behind the Henrician reformation, by G. R. Elton.

THE LIBRARY, 5th ser., vol. 10, no. 2:—A catalogue of 16th-century foreign printed books in Cambridge, by H. M. Adams; The London Society of Master Letter-founders, 1793–1820, by A. E. Musson.

No. 3:—The English stock of the Stationers' Company, by C. Blagden; Nathaniel Thompson, Catholic printer and publisher of the Restoration, by L. Rostenberg.

MAN, vol. 55, January 1955:—Flat bronze axes from Jorwe, Ahmadnagar District, Deccan, by H. D. Sankalia; Reports of the Ancient Mining and Metallurgy Committee: analyses of three Continental axes and of specimens of Irish ores, by H. H. Coghlan.

February 1955:—Iron gongs from the Congo and Southern Rhodesia, by J. Walton.

July 1955:—Rock paintings and engravings in Raichur, Hyderabad, by D. H. Gordon and F. R. Allchin.

August 1955:—Some cart and wagon decorations of the British Isles and Eire, by C. F. Tebbutt; The discovery of the right parietal bone at Swanscombe, Kent, by B. O. Wymer.

September 1955:—'Slash-and-Burn' cultivation: a contribution to anthropological terminology, by E. Ekwall; New Stone Age sites in the Arabian Peninsula, by H. Field.

MARINER'S MIRROR, vol. 41, no. 3:—The ship of the Renaissance, pt. 1, by R. M. Nance; Bittacles

and Binnacles, by D. W. Waters; William Sabyn of Ipswich: an early tudor sea-officer and merchant, by J. G. Webb; The foot boat of Shaohsing, by G. R. G. Worcester.

No. 4:—The ship of the Renaissance, pt. 2, by R. M. Nance; A problem in naval archaeology: *εμβολον* or *προεμβολον*, by G. B. Rubin de Cervin; Humber keels, by J. Frank.

NUM. CHRON., 6th ser., vol. 14, no. 44:—Cistophori in the name of King Eumenes, by E. S. G. Robinson; Greek coins recently acquired by the Ashmolean Museum, Oxford, by C. M. Kraay; Caesar's *Quattuorviri* of 44 B.C.: the arrangement of their issues, by C. M. Kraay; Verginius at Lugdunum?, by H. Mattingly; A Roman coin hoard from Mildenhall, Suffolk, by A. Robertson; The coinage of Macrianus II and Quietus, by H. Mattingly; A hoard of Roman folles from Wroxton Heath, nr. Banbury, Oxon., by C. H. V. Sutherland; The folles of Ticinum, A.D. 305–7, by C. H. V. Sutherland; The so-called piedforts of Alfred the Great, by R. H. M. Dolley; An imperial coinage in Southern Gaul in the 6th and 7th centuries?, by S. E. Rigold; Henry VIII harp groats and harp half-groats and Edward VI harp groats, by R. Caryl-Britton; A hoard of 16th- and 17th-century Russian silver coins, by D. M. Lang; The Chaman Huzuri hoard: countermarked Greek flans as the prototypes of the Indian punch-marked coinage, by A. D. H. Bivar; A 'coin' of Cyrus, by H. H. Figulla; The signs on the Kabul silver piece, by P. Hulin; Zinc coins in medieval China, by E. T. Leeds; Japanese coins in the British Museum, by C. C. Vermeule; A note on Hannibal's mahouts, by F. M. Snowden; Cast Sestertii of Titus, by C. M. Kraay; A hoard of Sestertii (Domitian-Commodus) from Slayhills Marsh, Upchurch, Kent, by P. H. K. Gray; The Elveden (Suffolk) treasure trove, by R. A. G. Carson and J. W. Brailsford; Mr. Wood's hoard of late Roman silver coins, by J. P. C. Kent; A late Constantinian hoard, by E. J. W. Hildyard and P. V. Hill; The Hanham (Glos.) hoard of Roman coins, by C. H. V. Sutherland; Notes on some 4th century coin types, by J. P. C. Kent; The mystery of Leontius II, by J. P. C. Kent; Farmborough treasure trove—addenda, by R. H. M. Dolley and P. Spufford; The Lenham Heath (Kent) hoard of sovereigns, etc., by J. P. C. Kent; A new hoard and some unpublished variants of the coins of the Sultans of Kilwa, by G. S. P. Freeman-Grenville.

BRIT. NUM. JOURN., vol. 27, pt. 3:—Three ancient British coins, by D. F. Allen; Saxon coins from Southampton and Bangor, by C. E. Blunt; A new Anglo-Saxon mint—Medeshamstede, by R. H. M. Dolley; The 'Jewel-Cross' coinage of Ælfifu Emma, Harthacnut and Harold I, by R. H. M. Dolley; Double moneyers' names on early Scottish pennies, by I. H. Stewart; The 1953 Bootham treasure trove, by R. H. M. Dolley and I. H. Stewart; The Yearby (Redcar) hoard, by J. P. C. Kent; An early 17th-century collection of Anglo-Saxon coins, by R. H. M. Dolley and Mrs. J. S. Strudwick; The Royal farthing tokens of James I, by C. W. Peck; The Oxford mint and the triple unites of Charles I, by R. D. Beresford-Jones; Some local tokens and their issuers in early 19th-century Swansea, by D. W. Dykes; The gold coinage of the mythical King Lucius, by R. H. M. Dolley; A small parcel from the great find at Eccles, by R. H. M. Dolley; A little-known Swedish publication of an important find of 13th-century English pence, by R. H. M. Dolley; Godsfield Row (Alresford) find 1871, by R. H. M. Dolley.

PALESTINE EXPLORATION QUARTERLY, May–Oct. 1955:—Excavations at Jericho, 1955, by K. M. Kenyon; Notes on the Bronze Age tombs of Jericho, 1, by F. E. Zeuner; Birds in the Old Testament, 2, by G. R. Driver; The earliest Biblical allusion to coined money?, by R. Loewe; Messianic symbols in Palestinian archaeology, by C. Roth; A provisional chronological table of the pre-historic and historic ages of Palestine, 2, by A. Rowe; Hebrew seals, by G. R. Driver.

PROC. PREHISTORIC SOC., 1954:—The tribes of Southern Britain, by C. A. R. Radford; The early Iron Age treasure from Snettisham, Norfolk, by R. R. Clarke; Celtic fields and farms on Dartmoor, in the light of recent excavations at Kestor, by A. Fox; The agriculture of the British early Iron Age as exemplified at Figheldean Down, Wiltshire, by S. Applebaum.

JOURN. ROMAN STUDIES, vol. 45, parts 1, 2:—*Vesper Adest* (Catullus LXII), by E. Fraenkel; The elections under Augustus, by A. H. M. Jones; Marcus Lepidus, *Capax Imperii*, by R. Syme; Notes on Cicero, *Ad Q. Fratrem*, by D. R. S. Bailey; The origin of verism in Roman portraits, by G. M. A. Richter; Senatorial and equestrian governors in the third century A.D., by H. Petersen; The Boscoreale figure-paintings, by M. Robertson; Stamped tiles found in Gloucestershire, by E. M. Clifford; The Roman law of treason under the early principate, by C. W. Chilton; Air reconnaissance in Britain 1951–5, by J. K. St. Joseph; The dictatorship of Minucius, by T. A. Dorey; The Temple of Sulis-Minerva at

- Bath, by I. A. Richmond and J. M. C. Toynbee; Diocletian's price-edict at Ptolemais (Cyrenaica), by G. Caputo and R. Goodchild; Diocletian's reform of the coinage: a chronological note, by C. H. V. Sutherland; An Augustan document recovered, by E. G. Turner; Roman Britain in 1954.
- PAPERS OF BRITISH SCHOOL AT ROME, vol. 22, 1954:—Prehistoric tombs near Zebbug, Malta, by J. G. Baldacchino and J. D. Evans; Excavations at Sphagion in Cyprus, by J. B. Hennessy; The municipal patrons of Roman North Africa, by B. H. Warmington; Oasis forts of *Legio III Augusta* on the routes to the Fezzan, by R. G. Goodchild; Constantine and the origins of the Christian basilica, by J. B. Ward Perkins; Ancient settlement in the Tripolitanian Gebel, II: the Berber period, by D. Oates; 'Combined Operations' in Sicily, A.D. 1060-78, by D. P. Waley; The camel in Roman Tripolitania, by O. Brogan; The Gorgon plaque at Syracuse, by S. Benton.
- BULL. JOHN RYLANDS LIBRARY, vol. 38, no. 1:—The Turkish colonization of Anatolia, by W. C. Brice; The influence of Islamic culture on medieval Europe, by Sir H. Gibb; A contribution to the archaeology of the Western Desert. 3. The temple-tombs of Alexander the Great and his palace in Rhacotis; The Great Wall of the Libyan desert, by A. Rowe; Sanballat and the Samaritan temple, by H. H. Rowley.
- PROC. SPELAEOLOGICAL SOC., vol. 7, no. 2:—Second report on the excavations at Sun Hole, Cheddar. The Pleistocene levels, by E. K. Tratman; The Pleistocene vertebrate fauna of Sun Hole Cheddar, by J. W. Jackson; The Pleistocene deposits at Gough's Cave, Cheddar, including an account of recent excavations, by D. T. Donovan; Notes on some human jaws and teeth from 'The Slitter', Cheddar, by E. K. Tratman.
- JOURN. WARBURG & COURTAULD INSTS., vol. 17, nos. 3-4:—The Wilton Diptych, by F. Wormald; Cephalus and Procris, by I. Lavin; The programme of the SS. Annunziata in Florence, by S. Lang; Aretino: artistic adviser to Francis I, by J. Adhémar; The decoration of the New Palace of Westminster, 1841-1863, by T. S. R. Boase.
- Vol. 18, nos. 1-2:—The vine columns of Old St. Peter's in Carolingian canon tables, by E. Rosenbaum; Images of the human hand as amulets in Spain, by W. L. Hildburgh; William Talman, by M. D. Whinney.
- ARCH. AELIANA, vol. 33, 1955:—The armorials of Newcastle upon Tyne, by C. H. Hunter Blair; The contents of a Northumberland mansion, by E. Craster; Mitford castle, by H. L. Honeyman; Gillycorn and the customary of the convent of Durham, by C. M. Fraser; A note on the chronology of the priors, archdeacons and sheriffs of Durham during the episcopate of Hugh du Puiset, by G. V. Scammell; Two charters of Bishop Hugh du Puiset of Durham relating to Landieu in Weardale, by G. V. Scammell; The social position and influence of the priors of Durham, as illustrated by their correspondence, by E. M. Halcrow; Robert Mylne and Tyne bridges, by C. Gotch; Some northern misericords, by Mrs. D. R. Fyson; Roman glass vessels in the Corstopitum museum, Corbridge, by W. Bulmer; Shortflatt Tower and its owners, pt. 2, by A. L. Raimes; Pottery from levels of the 2nd and 3rd century, covering the Vallum at Benwell, by B. Swinbank; The Pipe Rolls of Edward I, pt. 2, by A. J. Lilburn; Bookbinders of Northumberland and Durham, by W. S. Mitchell; Some northern anchorites, by R. M. Clay; Some excavations at Corbridge, 1952-4, by I. A. Richmond and J. P. Gillam.
- BEDS. ARCHAEOLOGIST, vol. 1, no. 2:—Luton Grammar School excavations 1951; Maiden Bower, by J. F. Dyer; Mesolithic sites at Tempsford, by C. F. Tebbutt; A neolithic 'B' hearth at Eaton Socon, by C. F. Tebbutt; The Willow Way Marsh site at Leagrave, by J. F. Dyer.
- BEDFORDSHIRE MAG., vol. 5, no. 34:—Recording Bedfordshire archaeology II, by F. W. Kuhlicke; Willington, by J. Godber; A Bedfordshire armorial: Leventhorpe, by F. W. Kuhlicke.
- No. 35:—A Bedfordshire armorial: De Port, by F. W. Kuhlicke; The 'Rack-Master General' of Sharpshoe, by T. W. Sweby.
- TRANS. BRISTOL & GLOS. ARCH. SOC., vol. 73, 1954:—The Roman Villa at Witcombe, by E. M. Clifford; Trial excavations at Sea Mills, 1954, by K. R. Nightingale; Deerhurst reconsidered, by E. Gilbert; Kingswood Abbey, its lands and mills, by E. S. Lindley; Compotus Rolls of St. Augustine's Abbey, Bristol, for the years 1503-4 and 1506-7, by A. Sabin; The parentage of William Tyndale, alias

Huchyns, translator and martyr, by C. Overy and A. C. Tyndale; The petitions of the weavers and clothiers of Gloucestershire in 1756, by W. E. Minchinton.

CAMBRIDGE HIST. JOURN., vol. 11, no. 3:—The Pontificate of Adrian IV, by W. Ullmann; The King and the Catalans, 1621-40, by J. H. Elliott.

JOURN. ROY. INST. CORNWALL, n.s., vol. 2, pt. 2:—The Celtic names of fish in Cornwall, by R. M. Nance; Church murals at Linkinhorne, by E. S. Lindley.

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ARCHEOLOGICKÉ ROZHLEDY, ročník 7, sešit 2:—Fouilles de la station paléolithique d'Ostrava-Petřkovice en 1953, par B. Klíma; Cabane néolithique près de Sobčice au pied de la chaîne de Krkonoše, par K. Šneidrová; Habitat préhistorique sur les Hradek près du mont de Mužský, Bohême, par E. Štiková; Contribution aux problèmes des débuts de la civilisation des tumuli, par E. Jilková; Hameau industriel hallstattien de Prague-Hloubětín, par B. Soudský; Sépultures romaines à incinération de Tišice en Bohême, par I. Hnízdová; Fouilles des constructions sidérurgiques à l'habitat de Tuchlovice I, Bohême, par R. Pleiner; Dernière campagne des fouilles de la citadelle médiévale de Martinice près de Votice, Bohême, en 1954, par K. Reichertová; Contribution à la classification de la céramique cordée en Bohême, par M. Buchvaldek.

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SLOVENSKA ARCHEOLOGIA, vol. 2, 1954:—Eine slawische Begräbnisstätte in Nitra unter dem Zobor, von P. Čaplovič; Les Magyars et les slaves à la lumière des fouilles archéologiques du x - xii^{e} siècle, par Z. Váňa; Ein altslawisches Gräberfeld in Mást bei Bratislava, von L. Kraskovská.

PROC. ROY. IRISH ACAD., vol. 57, section C, no. 2:—The Court of Wards and Liveries in Ireland, by H. F. Kearney.

JOURN. R.S.A. IRELAND, vol. 85, pt. 1:—'Preserve, examine, illustrate.' A commentary on the position of Irish archaeology, by S. P. Ó Ríordáin; A short history of the fisheries of the River Nore, by A. E. J. Went; Lough Gur excavations: the megalithic tomb, by S. P. Ó Ríordáin and G. Ó h-Iceadha; Old church plate of Lismore diocese, by R. W. Jackson; Carlow in the Middle Ages, by W. F. Nugent; A trackway in Corlona Bog, Co. Leitrim, by P. Tohall, H.L. de Vries and W. van Zeist; The Arthur

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L'ANTHROPOLOGIE, tome 59, no. 3-4:—La grotte ornée du Portel à Loubens, par l'Abbé Breuil et R. Jeannel; L'abri sous roche paléolithique de Grainfollet à Saint-Sulia, par P.-R. Giot et F. Bordes.

REVUE ARCHÉOLOGIQUE, 6 sér., tome 45, Avril-Juin 1955:—A l'Héraion du Silaris, près de Paestum, par J. Berard; Poésies et représentations carolingiennes et byzantines des mois, par H. Stern; Observations sur la crypte de Saint-Aignan à Orléans et ses chapiteaux, par J. Bathellier; Le calice dit de Tassilon, par E. Salin.

Tome 46, Jul.-Sept. 1955:—Sur la chlamyde de Démétrios Poliorcète, par M. T. Picard-Schmitter; Un temple de Valetudo à Glanum, par H. Rolland; Sur la filiation des grands clochers en charpente de la fin du moyen âge, par P. Hériot.

NOTICES D'ARCHÉOLOGIE ARMORICAINE, 1954, fasc. 2:—Quelques mots sur les relations préhistoriques entre Bretagne et Grande-Bretagne, par P.-R. Giot; Notices de numismatique celtique, par J.-B. Colbert de Beaulieu; Inventaire des stations d'augets morbihannaises, par Y. Coppens; Marques de potiers sur tessons de céramique sigillée conservés au musée de Rennes, par R. Cloastre; Une civitas éphémère: le 'Coz-Yaudet', par J.-L. Fleuriot.

REVUE ARCHÉOLOGIQUE DE L'EST ET DU CENTRE-EST, tome 6, fasc. 1:—Le tumulus de Dommarien et les tertres funéraires du Montsaugonnais, par P. Mouton; Les thermes gallo-romains d'Aix-en-Othe, d'après la collection Rochez-Coudrot, par B. Lacroix; Autres vestiges gallo-romains trouvés à Aix-en-Othe, par F. Gabut et E. Rousseau; Les sarcophages antiques du Cher, par J. Favière; 'Et omnes stellae ex cornibus alcinis'. Talismans gallo-romains en bois de cerf ou d'élan trouvés dans les tombes, par J.-J. Hatt.

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HESPÉRIS, 1955, trim. 1-2:—La qasba des Gnaoua, par J. Caillé et J. Hainaut; Note sur quelques vestiges de céramique recueillis à Salé, par A. Delpy; Mogador et les îles purpuraires, par J. Desjacques et P. Koeberlé; El-Basra, capitale idrissite, et son port, par D. Eustache.

BULL. MONUMENTAL, tome 113, 1955-2:—Le château d'Oudon, par R. Grand; Le tombeau de Pierre de Bauffremont, chambellan de Philippe le Bon, par P. Quarré; Un essai de consolidation au XIII^e siècle: l'église de Montarlot, par A. Bray; Le rétable de Rouxville, par A. Rostand.

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BULL. TRIMESTRIEL DE LA SOC. DES ANTIQUAIRES DE PICARDIE, 1954, trimestres 3, 4:—Les ports fluviaux et le Chemin de l'Eau à Amiens (x–xvi^e siècles), par M. Massiet du Bie; Notes archéologiques sur les églises fortifiées de la Thiérache, par R. Rodière.

1955, trimestres 1, 2:—Compte rendu des trouvailles faites à Amiens et dans le département de la Somme, par F. Vasselle; Études sur les vitraux de Picardie, par P. Hainselin et G. R. Canton.

BULL. SOC. PRÉHISTORIQUE FRANÇAISE, tome 52, fasc. 3–4:—L'Acheuléen moyen de Vassincourt et la question de l'Acheuléen 'froid', par F. Bordes; L'Homme des Cités lacustres au Mont Hérappel, par E. Berghol; Inhumation de l'âge du bronze final à Montgivray, par G. Gaudron; La Faune de la Station de Saint-Romain, par T. Josien; La question du Périgordien II, par D. de Sonnevill-Bordes; Les civilisations tardenoisennes en Europe occidentale, par C. Barrière; Sur les civilisations tardenoisennes en Europe occidentale, par E. Vignard; À propos des pièces préhistoriques géantes et du gigantisme, par J. Morel; Le Levalloisien du Guébel-Silsilé. Région de Kom-Ombo, Haute-Égypte, par E. Vignard; Les données poitevines pour la chronologie de la période froide, par R. Facon; Quelques considérations sur les gisements de Mammifères pléistocènes et leur signification climatique, par J. Viret.

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GERMANIA, Jahrgang 33, Heft 3:—Zur Frage der Schnurkeramik in Griechenland, von V. Milojević; Keramik der Badener Kultur aus Ufersiedlungen des Bodensees, von R. A. Maier; Zur Gürtelkette aus Raggendorf, N. Ö., von J. Haberl; Die Aula Palatina in Trier, von W. Reusch; Die Heizung der Aula Palatina in Trier, von F. Kretschmer; Der Abtsstab des heiligen Germanus von Delsberg, von G. Haseloff.

HAMMABURG, Jahrgang 4, Heft 9–10:—Die Ausgrabungen in der Großen Reichenstraße zu Hamburg (1953–4), von H.-G. Steffens; Das spätsächsische Hügelgräberfeld von Buchholz-Vaensen im Kreise Harburg, von W. Wegewitz; Werkzeug- und Gebrauchsspuren an den Fundstücken des Hortfundes von Bargfeld, von H. Drescher; Eine doppelschneidige Streitaxt aus Hamburg-Harburg, von W. Wegewitz; Ein spätbronzezeitliche Urnenfriedhof in Hamburg-Bergstedt, von F. Lienau; Gräber der älteren Eisenzeit in Hamburg-Hummelsbüttel, von E. Krawczyk; Mittelsteinzeitliche Düdensiedlung in Flessenow/Mecklenburg, von G. Gärtner; Der Duhner Wehrberg, von K. Waller; Schneidesteine, von G. H. Brückner; Eine germanische Siedlung des 1–5 Jahrh. n. Chr. in Hamburg-Farmsen, von R. Schindler; Ergebnisse einer Untersuchung von Bodenproben aus der eisenzeitlichen Siedlung bei Farmsen mit der Phosphatmethode, von W. Lorch; Der Brunnen in der germanischen Siedlung in

Hamburg-Farmsen, von F. Westhusen; Ein Brunnen der vorchristlichen Eisenzeit aus Pinneberg-Waldenau, von O. Friedrichsen.

MAINZER ZEITSCHRIFT, Jahrgang 48/49, 1953/54:—Studien zur Verfassung der Mainzer Stifte, von A. Gerlich; Die Stationsfeiern in Mainzer Stiften, von A. B. Gottron; Ein Hügelgrab der Hallstattzeit im Oberolmer Wald bei Mainz, von U. Fischer; Zwei römische Steinplastiken aus Hechtsheim bei Mainz, von W. von Pfeffer; Bericht der rheinhessischen Bodendenkmalpflege für die Jahre 1950/51 bis 1952/53, von H. Schermer; Verschwundene Mainzer Römerbauten, von G. Behrens; Das Mainzer Marienleben im Werke des Hausbuchmeisters, von A. Stange; Profanbauten der Pfarrkirche St. Quintin im 17. und 18. Jahrhundert, von H. Fritzen; Mainzer Stuckateure der Bandlerwerkzeit, von L. Döry; Das Mainzer Jesuitennoviziat (ehemaliges Invalidenhaus), von F. Arens.

RHEINISCHE VIERTELJAHRBLÄTTER, Jahrgang 19, Heft 3/4:—Der Ursprung der Kölner Stadtgemeinde, von F. Steinbach; Von Römerkastell Andernach zur mittelalterlichen Stadt, von K. Zimmermann; Burg und Festung Homburg, von K. Hoppstädter.

FUNDBERICHTE AUS SCHWABEN, n. f. 13, 1952-54:—Der Bockstein im Lonetal, Markung Rammingen, von R. Wetzel; Die steinzeitliche Besiedlung des Kreises Ludwigsburg vor 4500 Jahren, von O. Paret; Der große Fund von Bronzegußformen der Spätbronzezeit von Neckargartach, von O. Paret; Ein großes römisches Denkmal auf dem Kleinen Heuberg beim Häsenbühlhof, von O. Paret; Ein Fund römischer Münzfälschungen aus Rottenburg, von E. Nau.

BULL. KON. NED. OUDHEIDKUNDIGE BOND, 6th ser., Jrg. 8, Afl. 2:—Historical survey of the site of St. Peter's Hospital at Amsterdam, by R. Meischke.

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oudheidkundige mededelingen, n.r. 36:—Une statuette étrusque en bronze, par J. H. C. Kern; Ein rhodisches Parfümväschen in Form eines Frauenkopfes, von J. H. C. Kern; An Attic red-figured lekythos of the Bowdoin painter, by J. H. C. Kern; Twee Walcherse werven, van W. C. Braat; Romeins Nijmegen IV: de Romeinse monumenten van steen, te Nijmegen gevonden, von M. Daniëls; Het probleem der oudoosterse sculptuur, van W. van Os; Het graphisch systeem van de magische papyrus Londen & Leiden, van B. H. Stricker.

ARCHAEOLOGIAI ÉRTESÍTŐ, vol. 82, 2:—La statuette de cheval de Bakonybél, par M. Roska; Maisons de l'âge du Bronze, à Várdomb près de Békés, par J. Banner; La reconstitution des bâtiments de l'âge du Bronze de Várdomb près de Békés, par L. Vargha; Les résultats récents de notre recherche de l'époque scythique, par M. Párducz; Quelques problèmes de notre recherche du premier âge du Fer, par E. Patek; Ferrures de coffret romaines tardives, trouvées à Kisárpás, par A. Radnóti; La tombe de l'époque hunnique à Keszthely, par K. Sági; Le trésor en argent du moyen âge tardif de Kerepes, par A. Kralovánszky; Tumuli hallstattiens dans la région du Mont Ság, par J. Lázár; Fouilles du sauvegarde effectuées, en 1949, dans la région du ruisseau Csele, près Mohács, par G. Fehér.

IRAQ, vol. 17, pt. 2:—Excavations at Nimrud, 1949-55: seals and seal impressions, by B. Parker; The Nimrud letters, 1952, pt. 2. Relations with the west, by H. W. F. Saggs; Note on a shaft-hole axe-pick from Khurab, Makran, by K. R. Maxwell-Hyslop; The identity of the camel on the Khurab pick, by F. E. Zeuner; New evidence concerning an eye-divinity, by E. D. van Buren.

SUMER, vol. 11, no. 1:—Recent developments in Assyrian and Babylonian archaeology, by M. E. L. Mallowan; Shanidar Cave, a palaeolithic site in northern Iraq, its relationship to the Stone Age sequence of Iraq, by R. S. Solecki; A note on three Latin inscriptions from Hatra, by D. Oates; On the system of Babylonian geometry, by E. M. Bruins; Notes d'archéologie mésopotamienne à propos de quelques cylindres inédits du Musée de Bagdad, par P. Amiet; Bibliography of excavations in Iraq 1952-54, by G. Awad.

ATIQUOT: JOURN. ISRAEL DEPT. OF ANTIQUITIES, vol. 1, 1955:—A cemetery of the Bronze Age discovered near Tel Aviv harbour, by J. Kaplan; Description of the scarabs found in a cemetery near Tel Aviv, by J. Leibovitch; The excavations at 'Afula, by M. Dothan; Le griffon dans le moyen-orient antique, par J. Leibovitch; Two fragments of a marble door from Jaffa, by J. Pinkerfeld; Three

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ÅRSBERÄTTELSE, Bulletin de la Soc. Roy. des Lettres de Lund. 1954-55:—Mesolitische Harzornamentik, von M. P. Malmer und E. Magnusson; An early Viking Age grave from Källby, Lund, by D. M. Wilson; Wäsit, the mint-town, by U. S. Linder; Kalkmålningar i Äspö kyrka och Adamsbildens samband med senmedeltidens samhällsutveckling, av E. Cinthio; Adamstexten i Äspö kyrka, av I. Lindquist; Renaissancegläser von Herrevadskloster, Schonen, von B. Malmer; Bronze Age finds from Lyngsjö, by L. Halbert; The picks of the Scanian 'flint mines', by C.-A. Althin; Ein ornierter Steinfragment aus Väsby in Schonen, von M. Strömberg; A fragment of carved timber from Aspinge Church, by E. Gustafsson; Some notes on the preservation of bone, antler and other organic materials, by G. Rausing.

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MATERIALY I ISSLEDOVANIYA PO ARKHEOLOGII SSSR, vol. 42, 1954 (in Russian):—Some Bronze Age settlements on the river Usa in Kuybyshev Volga basin, by N. V. Trubmova; The archaeology of the Middle Transvolga, by H. Y. Merpert; Bronze Age settlements in the Kazan-Volga territory excavated in 1951-2, by N. F. Kalinin and A. K. Khalikov; The cemetery of Gulkin, by A. V. Zbrueva; The cemetery and settlement of Muranki, by A. E. Alikhova; The main stages of the history of Bolgar and its topography, by A. P. Smirnov; Aga-Bazar, by B. B. Zhiromski; The potter's crafts of Bolgar, by O. S. Khovanskaya; The remains of ancient Bolgar, by A. M. Efimova; The defensive walls of Bolgar, by O. S. Khovanskaya; Coins of Drushiev, excavated by the Knibyshev Expedition at Bolgar in 1946-52, by S. A. Yanina; Paleo-anthropological material from the graves of the Srubnaya culture in the middle Transvolga region, by G. F. Debets; Skulls from the cemetery at Gulkin of the Ananino culture, by T. A. Trofimova.

Vol. 43, 1955 (in Russian):—Neolithic and Bronze Age of the Baikal region, pt. 3. The Glazkov Period, by A. N. Okladnikov.

Vol. 44, 1955 (in Russian):—Materials and researches in the archaeology of Moscow. vol. 3. The plans of the Uspenski church in Moscow of 1326 and 1472, by K. K. Romanov; The Uspenski church at Zvenigorod, by B. A. Oguev; The fortified city of Borisov, by P. A. Rappoport; The date and distribution of some Moscow tiles, by N. V. Vornov and I. G. Sakharov; The defences of the 'Zasechnaya Chest' of the 16th and 17th century, by A. V. Nikitin; The role of the mint in Moscow economy, 1533-1617, by I. G. Spasskii.

ARCHIVO ESPAÑOL DE ARQUEOLOGÍA, vol. 27, 1-2 sem., nos. 89 and 90:—Magia y religión del toro norteafricano, por A. A. de Miranda; La Edad del Bronce de la Península Ibérica, por P. Bosch-Gimpera; El arco honorífico en el desarrollo de la arquitectura romana, por G. A. Mansuelli; Semblanza arqueológica de Bīlbilis, por M. Dolç; El vaso puteolano de Ampurias, por A. García y Bellido; Terra sigillata hispánica, por C. M. Munilla.

ARCHIVO ESPAÑOL DE ARTE, no. 109, tome 28:—Los maestros yeseros sevillanos del siglo XVI, por J. G. Lovillo; Algunas notas sobre los capiteles historiados de San Martín, de Segovia, por E. Upmann.

BOL. DEL SEMINARIO DE ESTUDIOS DE ARTE Y ARQUEOLOGÍA, tomo 20:—La expansión de los temas decorativos del arte románico, por A. de Apraiz; Études hispano-limousines, par R. Crozet; El retablo mayor de la iglesia parroquial de Olivares de Duero, por J. J. M. González; Los artistas de la colegiata de Villa-garcía de Campos, por E. G. Chico; Arqueología romana en la región del Duero, por F. Wattenberg; La catedral de Palencia según los protocolos, por T. G. Cuesta; Las excavaciones en la Granja José Antonio de Valladolid, por S. R. Manescau y F. Wattenberg.

KUSH, vol. 2, 1954:—Sultans' palaces in Darfur and Waddai, by H. G. Balfour-Paul; Four Khartoum Stelae, by J. W. B. Barns; Christian monuments from Nubia, by J. W. B. Barns; Four occupation sites at Agordat, by A. J. Arkell; The Khor Nubt tombstones, by H. Glidden; Excavations at Tanqasi, 1953, by P. L. Shinnie.

FÖRNVÄNNEN, 1955, Häfte 2-3:—Ein spätneolithischer Wohnplatz in Ost-Schonen, von M. Strömberg; Die uralte Anbau des Ackerbodens, von O. Arrhenius; Köping and Föra. Valuable restorations of two Öland churches, by R. Boström; The mystic paradise according to the Speculum Virginum and Johannes Rosenrod's paintings in the chancel of Tensta Church, by F. Nordström; A Bronze Age find from Resmo Parish, Öland, by K. G. Petersson; Where does the amber in the South European Bronze and Iron Age finds come from?, by C.-A. Moberg; Some medieval textiles and their provenance, by A. Nisbeth.

Häfte 4:—Von Vallhagar bis Horn und Saxeröd, von C.-A. Moberg; Die Madonna in Gesäter und ihre Verwandten, von A. Andersson; L'épithaphe de Johan Gabriel Stenbock dans Storkyrkan, par G. Grundström; Man och orm. En bildframställning på en grupp gotländska spännen från sen venedeltid, av B. Nerman.

UPPLAND, 1955:—Några nya fynd av forntida gravstenar i Uppland, av N. Sundquist.

BASLER ZEITSCHRIFT, Band 54, 1955:—Basler Antiken im Bild, von K. Schefold; Römische Inschriften in der Reisebeschreibung des jüngern Thomas Platter, von H. Lieb.

ARCHIVUM HERALDICUM, anno 69, bull. no. 3:—Les armoiries du dernier empereur du Saint-Empire, par H.C. de Z; Méprises ou fantaisies héraldiques, par O. Clottu.

Bull. no. 4:—Heraldik auf Epitaphien, von A. S. von Brunegg.

UR-SCHWEIZ, Jahrgang 19, nr. 2:—Das Römerhaus von Augusta Raurica, von R. Laur-Belart; Thermes romains à Massongex, par E. Pelichet; Italienische Parallelen zum Alpinen Paläolithikum der Schweiz, von A. Gansser-Burckhardt.

Nr. 3:—Vestiges du début de l'époque romaine découverts en 1955, par A. Kasser; Fouilles de Pro Avenico: de nouveaux thermes à Avenicum, par J. Bourquin.

TÜRK TARİH KURUMU: BELLETEN, tome 18, no. 72:—Fragment of a lion statue found in the late phase (Ib) of the Colony Period, by T. Özgüç; Formations in the Hittite language, by S. Alp; Sculptured and inscribed stones at Burdur, by G. E. Bean; Nouveau sarcophage trouvé à Konya, par A. M. Mansel; A note on the long bones of Chalcolithic Age from Yümüktepe, by M. S. Şenyürek; Die Entstehung des Antiken Repräsentationsbildes, von L. Budde.

Tome 19, no. 73:—Excavations at Kültepe, 1954. Finds on Level Ib, by T. Özgüç; Report on a workshop belonging to the late phase of the Colony Period (Ib), by T. Özgüç.

No. 74:—Iron Age pottery from southern Anatolia, by J. Mellaart; A note on the long bones of Chalcolithic age from Şeyh Höyük, by M. Şenyürek.

ARCHAEOLOGIA IUGOSLAVICA, vol. 1, 1954:—Zur Zeitbestimmung des Beginns der Vinča-Kultur, von M. V. Garašanin; Quelques éléments nouveaux sur les vases du type de Butmir, par A. Benac; A neolithic statuette from Bečej in Banat, by M. Grbić; Quelques éléments datant la civilisation de Bubanj-Hum, par D. Garašanin; Ein interessanter Rhytonfund in Ljubljana, von J. Korošec; Einige hellenistische Elemente in der Skulptur des antiken Salona, von K. Prijatelj; Iconographie de Mithra tauroctone dans la province romaine de Dalmatie, par B. Gabričević; Neue Funde in der altchristlichen Nekropole Manastirine in Salona, von D. Rendić-Miočević; Gibt es frühslawische Keramik aus der Zeit

der südslawischen Landnahme? par Z. Vinski; L'encensoir des environs de Kuršumlja, par M. Ćorović-Ljubinković; À propos de l'église de Pribina à Blatnograd — ville de Balaton, par L. Karaman; Nécessité d'une révision des fouilles de l'époque croate ancienne, par S. Gunjaca; L'église de Sainte-Sophie à Salonique et son reflet dans deux monuments postérieurs en Macédoine et en Serbie, par D. Bošković; Fragments du style roman à Dubrovnik, par C. Fisković.

GLASNIK MUS. SARAJEVO (Archaeology), tome 10, 1955:—Représentations illyriennes de Sylvanus sur les monuments du culte dans le domaine Dalmate, par D. Rendić-Miočević; Le trône en pierre de Bukovica, par A. Kučan et D. Mazalić; Station néolithique de Lisičić près de Konjic, par A. Benac; Quelques découvertes préhistoriques dans les environs de Nikšić au Monténégro, par A. Benac; Das Depot von Lukavac, von B. Čović; Nouvelles recherches de monuments de l'antiquité près de Konjic et Travnik, par I. Čremošnik; Nouvelles découvertes médiévales près de Prijedor, par I. Čremošnik; Borne milliaire romaine sur la route Narona-Salona, par D. Sergejevski; Découvertes des fibules du début du moyen âge de Rajlova, par N. Miletić; Die Grabdenkmäler der Feudalherren Sanković in Biskup bei Konjic in der Herzegovina, von M. Vego; Ein Fund Mathias Korvinus 1458–1490 und Wladislav II, 1490–1516 Münzen in Laminci bei Bos. Gradiška gehoben, von J. Petrović; Antoniniani Fund aus Obudovac, von J. Petrović; Découvertes d'ancienne monnaie romaine aux environs de Nikšić et sur le territoire de l'arrondissement de Nikšić, par J. Ivoić; Fund von Ragusaner Dinaren in Vareš, von M. Vego; Nombre des monuments sépulcraux médiévaux en Bosnie et Herzégovine, par A. V. Solovjev; La vallée de la Neretva de Konjic jusqu'à Roma, par D. Basler.

STARINAR, n.s., vols. 3–4, 1952–3:—La nécropole de Kličevac, par M. M. Vasić; Vinča et les Illyriens, par B. B. Gavella; Contributions à l'histoire de la Serbie dans l'antiquité, par R. Marić; Le monastère de Veluče, par V. R. Petković; Une scène du roman de Barlaam et Josaphat dans l'église de Notre-Dame de Ljeviša à Prizren, par S. Radojčić; Deux icônes de la Vierge du monastère de Dečani, par M. Ćorović-Ljubinković; La Déesis de l'iconostase de Krušedol, par L. Mirković; La station néolithique de Žarkovo, par M. V. Garašanin et D. Garašanin; Les fouilles de Caričin Grad en 1949–1952, par D. Mano-Zisi; La basilique à crypte de Caričin Grad, par N. Spremo-Petrović; Le château fort d'Užice, par I. M. Zdravković; L'ancienne église de Lipljan, par I. M. Zdravković; Stambol Kapija à Beograd, par D. M. Jovanović; À propos des découvertes préhistoriques et du haut moyen âge dans un tumulus de Klinci, par M. V. Garašanin; Deux masques romains en bronze, par M. Grbić; Notes archéologiques et historiques de Macédoine, par R. M. Grujić; L'icône de la Vierge de Beograd à Constantinople, par A. Deroko; Deux manuscrits du monastère de Manasija, par S. Troicki; Old castles in the basin of the Markova Reka, by J. F. Trifunski; L'élévation de l'eau tirée des puits profonds dans les anciennes forteresses, par D. M. Jovanović.

BIBLIOGRAPHY

AMERICAN ARCHAEOLOGY

- Clay figurines of the American Southwest. By Noel Morss. $10\frac{1}{2} \times 7\frac{1}{4}$. Pp. x+75+figs. 31. Peabody Museum of American Archaeology and Ethnology, vol. 49, no. 1. Cambridge, Mass., U.S.A.: published by the Museum 1954.
Trinity Church in Newport, Rhode Island, U.S.A. 10×7 . Pp. 30. n.d.

AFRICAN ARCHAEOLOGY

- History and Archaeology in Africa. Report of a conference held in July 1953 at the School of Oriental & African Studies. Ed. by R. A. Hamilton, with a foreword by Professor C. H. Philips. $9\frac{1}{2} \times 7$. Pp. 99. School of Oriental & African Studies, University of London, 1955.
A short history of the Sudan (up to A.D. 1500). By Margaret Shinnie. Sudan Antiquities Service, Museum Pamphlet, No. 1. $8\frac{1}{2} \times 6\frac{1}{2}$. Pp. 8. Khartoum, n.d. 20 m/ms.
The monuments of South Africa. Ed. by C. van Riet Lowe and B. D. Malan. 2nd revised and enlarged edition. $9\frac{1}{2} \times 7\frac{1}{4}$. Pp. xii+179. Printed by order of the Government printer, Pretoria, by L. S. Gray & Co., Johannesburg, 1949.
The soapstone birds of Zimbabwe. By James Walton, F.S.A. $9\frac{1}{2} \times 7\frac{1}{4}$. Reprint: *South African Archaeological Bulletin*, Sept. 1955. Pp. 78-84.

ANCIENT MONUMENTS

- Illustrated guide to Ancient Monuments in the ownership or guardianship of the Ministry of Works. Vol. 6, Scotland. By Prof. V. Gordon Childe, D.Litt., D.Sc., F.B.A. and W. Douglas Simpson, O.B.E., D.Litt., F.S.A. 2nd Edn. $7\frac{1}{4} \times 5$. Pp. 132. Edinburgh: H.M. Stationery Office, 1954. 6s.
St. Augustine's Abbey, Canterbury, Kent. By the late Sir Alfred Clapham, C.B.E., F.B.A., F.S.A. $8\frac{1}{2} \times 5\frac{1}{4}$. Pp. 25. London: H.M. Stationery Office, 1955. 1s. 6d.
A guide to Dunluce Castle, Co. Antrim. $8\frac{1}{2} \times 5\frac{1}{4}$. Pp. 8. Belfast: H.M. Stationery Office, 1951. 6d.
A guide to Grey Abbey, Co. Down. $8\frac{1}{2} \times 5\frac{1}{4}$. Pp. 8. Belfast: H.M. Stationery Office, 1953. 6d.
A guide to Jordan's Castle, and F. J. Bigger Collection of Antiquities, Ardglass, Co. Down. $8\frac{1}{2} \times 5\frac{1}{4}$. Pp. 8. Belfast: H.M. Stationery Office, 1949. 3d.
Portchester Castle, Hampshire. By the late Sir Charles Peers, C.B.E., F.B.A., F.S.A. $8\frac{1}{2} \times 5\frac{1}{4}$. Pp. 12. London: H.M. Stationery Office, 1955. 1s.
Chepstow Castle, Monmouthshire. By John Clifford Perks, M.C., M.A. $8\frac{1}{2} \times 5\frac{1}{4}$. Pp. 33. London: H.M. Stationery Office, 1955. 1s. 6d.

ARCHAEOLOGY: GENERAL

- Der Aufstieg der Menschheit. von Dr Herbert Kühn. $7 \times 4\frac{1}{4}$. Pp. 226+taf. 16. Frankfurt/M. Hamburg: Fischer Bücherei, 1955.
Aspects of the ascent of a civilization. By Sir Mortimer Wheeler. L. T. Hobhouse Memorial Trust Lecture, No. 25, delivered on 17 May 1955 at the London School of Economics and Political Science. $8\frac{1}{2} \times 5\frac{1}{4}$. Pp. 24. London: Geoffrey Cumberlege, Oxford University Press, 1955. 2s. 6d.

ARCHITECTURE

- Arquitectura gótica. Por Leopoldo Torres Balbás. $10\frac{1}{2} \times 8\frac{1}{4}$. Pp. 402. Ars Hispaniae. Historia universal del arte hispánico, vol. 7. Madrid: Editorial Plus-Ultra, 1952.
Murray's Lancashire architectural guide. By Peter Fleetwood-Hesketh. 10×7 . Pp. xv+194. London: John Murray, 1955. 28s.
Sir Christopher Wren. By N. Pevsner, F.S.A. $8\frac{1}{2} \times 5\frac{1}{4}$. Reprint: *Proc. Roy. Institution of Gt. Britain*, vol. 35, pt. 4, No. 161 (1955) pp. 734-9.

ART

- The art and architecture of Japan. By Robert Treat Paine and Alexander Soper. $10\frac{1}{2} \times 7$. Pp. xix+316+pls. 173. The Pelican History of Art. Harmondsworth, Middlesex: Penguin Books, 1955. 45s.

BIBLIOGRAPHY

A bibliography of printed works relating to Oxfordshire (excluding the University and City of Oxford). By E. H. Cordeaux, M.A., and D. H. Merry, M.A. $8\frac{1}{2} \times 5\frac{1}{2}$. Pp. xv+411. Oxford Historical Society, new series, vol. II. Oxford: At the Clarendon Press, 1955.

BIOGRAPHY

Robert Holgate, Archbishop of York and President of the King's Council in the North. By A. G. Dickens. $8\frac{1}{2} \times 5\frac{1}{2}$. Pp. 32. St. Anthony's Hall Publications, no. 8. London: St Anthony's Press, 1955. 2s. 6d.
Seventeenth-century biographies. By V. de S. Pinto, M.A., D.Phil. $7\frac{1}{4} \times 4\frac{1}{4}$. Pp. 32. Reader's Guides, second series, no. 5. Cambridge: published for the National Book League at the University Press, 1955. 2s. 6d.

CATALOGUES

The Library and the Picture Collection of the Port of London Authority. By Bertram Stewart. $9\frac{1}{4} \times 6$. Pp. xxii+86 London: The Richards Press, 1955.

CLASSICAL ARCHAEOLOGY

- The Tyrant-slayers of Kritios and Nesiotes. By Sture Brunnsäker. $11\frac{1}{2} \times 9$. Pp. 174+pls. 24. Lund: Håkan Ohlssons Boktryckeri, 1955.
Geneza Tropaionu (La genèse de Tropaion). By Zofia Gansiniec. 10×7 . Pp. 159. (French summary) Warszawa, 1955.
Jewish Symbols in the Greco-Roman World. By Edwin R. Goodenough. 4 vols. 12×9 . Vol. 1. The Archaeological evidence from Palestine. Pp. xvii+300. Vol. 2. The archaeological evidence from the Diaspora. Pp. xi+323. Vol. 3. Pp. xxxv+10+figs. 1209. Vol. 4. The Problem of Method. Symbols from Jewish Cult. Pp. xiii+229+figs. 117. New York: Bollinger Series XXXVII: Pantheon Books, 1953-4.
Structural iron of the Parthenon. By C. J. Livadefs, D.Sc. $11 \times 8\frac{1}{2}$. Reprint: *Journ. of the Iron and Steel Institute*, Jan. 1956, pp. 49-66.
The Etruscans. By M. Pallottino. $7\frac{1}{4} \times 4\frac{1}{4}$. Pp. 295. Pelican Books, A 310. Harmondsworth, Middlesex: Penguin Books Ltd., 1955. 3s. 6d.
Pauly-Wissowa. Realencyclopädie des classischen Altertumswissenschaft, VIII A i. Valerius Fabrianus—P. Vergilius Maro. $10 \times 6\frac{1}{2}$. Pp. 1263. Stuttgart: Alfred Druckenmüller Verlag, 1955.
Greek ostraca in the Bodleian Library, Oxford. Ed. by John Gavin Tait and Claire Préaux. Vol. 2. Ostraca of the Roman and Byzantine periods. $9\frac{1}{2} \times 6$. Pp. xiv+434. London: Egypt Exploration Society, 1955.
Ténédos et Vinča. By M. Vassits. $9\frac{1}{2} \times 6\frac{1}{2}$. Reprint: *Glas CCXIV*, de l'Académie serbe des Sciences, classe des Sciences sociales, n.s. no. 3, pp. 115-18. Belgrade, 1954.
Corpus Vasorum Antiquorum. France. Musée du Louvre. Par François Villard, sous la direction d'Alfred Merlin. France-fasc. 18. Louvre-fasc 11. $12\frac{3}{4} \times 10$. III Hb. Style attique géométrique, pp. 20+pls. 16. III Hc. Style attique à figures noires (*suite*), pp. 105-20+pls. 120-51. Paris: Librairie ancienne Honoré Champion, 1954.

DARK AGES

- An introduction to Anglo-Saxon England. By Peter Hunter Blair. $8\frac{1}{2} \times 5\frac{1}{2}$. Pp. xvi+382. Cambridge: at the University Press, 1956. 30s.
Les cryptes mérovingiennes de l'Abbaye de Jouarre. Par Yvan Christ. $8\frac{1}{2} \times 6$. Pp. 31+pls. 32. Paris: Éditions d'Histoire et d'Art, Librairie Plon.
Das fränkische Reihengräberfeld Köln-Müngersdorf. Von Fritz Fremersdorf. $12\frac{1}{4} \times 9$. Textband. Pp. xi+167. Tafelband. Taf. 140. Berlin: Walter de Gruyter, 1955.
Formenkreise und Stammesgruppen in Schleswig-Holstein. Von Albert Genrich. $11\frac{1}{2} \times 8\frac{1}{2}$. Pp. 78+taf. 55. Neumünster: Karl Wachholtz Verlag, 1954.
Germanic art during the first millennium A.D. By Wilhelm Holmqvist. $9\frac{1}{2} \times 6\frac{1}{2}$. Pp. 89+pls. 62. Kungl. Vitterhets Historie och Antikvitets Akad. Handlingar, Del. 90. Stockholm: Almqvist & Wiksell, 1955.
Oreficerie longobarde a Parma. Per Giorgio Monaco. $10\frac{1}{4} \times 7\frac{1}{2}$. Pp. 42+tav. 20. Parma, 1955.

- Vallhagar: a Migration Period settlement on Gotland, Sweden. Ed. by Märten Stenberger in collaboration with Ole Klindt-Jensen. 11½ × 8. 2 vols. Pp. 1025. Copenhagen: Ejnar Munksgaards Forlag, 1955.
- Das alamannische Gräberfeld von Mindelheim. Von Joachim Werner. 11½ × 8½. Pp. 40 + taf. 46. Materialhefte zur Bayerischen Vorgeschichte, Heft 6. Kallmünz: Verlag Michael Laibleben, 1955.

EGYPTOLOGY

- A history of the Giza necropolis. Vol. 2. The tomb of Hetep-heres the mother of Cheops. By George Andrew Reisner. 13½ × 10. Pp. xxv + 107 + figs. 147 + pls. 55. Cambridge, Massachusetts: Harvard University Press, 1955.

FOLKLORE

- Dionysos et notre folklore. By M. Vassits. 9½ × 6½. Reprint: *Glas CCXIV*, de l'Académie serbe des Sciences, classe des Sciences sociales, n.s. no. 3, pp. 129-164. Belgrade, 1954.

HERALDRY

- Les armoires étrangères dans les armoriaux français du moyen âge. Par Paul Adam Even. 9½ × 6½. Reprint: *Hidalguia*, Sept.-Oct. 1955, pp. 1-16.
- Lants' Roll. By H. Stanford London. 9 × 6. Reprint: *Stockholm Studies in English*, vol. 5, 1955, pp. 35-36.

HISTORY AND TOPOGRAPHY

- Windmills in Kent. By J. W. R. Adams. 8 × 6½. Pp. 32. Kent County Council, 1955.
- Historic Hastings. By J. Manwaring Baines, F.S.A. 9½ × 7½. Pp. xv + 433. Hastings: F. J. Parsons, Ltd., 1955. £5. 5s.
- Ecclesiastical terriers of Warwickshire parishes, vol. 1. Parishes A to Li. Transcribed and ed. by D. M. Barratt, D.Phil. Dugdale Society, vol. 22. 9½ × 6½. Pp. lix + 191. Printed for the Dugdale Society at the University Press, Oxford, 1955.
- Farmhouses and cottages, 1550-1725. By M. W. Barley. 10 × 7. Reprint: *Economic History Review*, vol. 7, No. 3, pp. 291-306.
- Vom Untergang der Abtei Rheinau. Von Gottfried Boesch. 9½ × 6½. Pp. 71. Mitteilungen der Antiquarischen Gesellschaft in Zürich, Band 38, Heft 3. Zürich, 1956. Fr. 4.
- Kent Records, vol. 15. Calendar, Kent Feet of Fines. Prepared in collaboration by Irene J. Churchill, D.Phil., F.S.A., the late Ralph Griffin, F.S.A., and the late F. W. Hardman, LL.D., F.S.A. Part IV. 8½ × 5½. Pp. 325-419. Issued to subscribers to the Records Branch, Kent Arch. Soc., 1955.
- Early Yorkshire Charters, vol. 10. The Trussebut Fee, with some charters of the Ros Fee. Based on the manuscripts of the late William Farrer and ed. by Charles Travis Clay, C.B., F.B.A. Yorks. Arch. Soc. Record Series, extra series, vol. 8. 9½ × 6½. Pp. xxvii + 215. Printed for the Yorkshire Archaeological Society, 1955.
- Old S. Paul's Cathedral. By G. H. Cook. 9½ × 6. Pp. 112. London: Phoenix House, 1955. 42s.
- The ancestry of Mary Isaac, c. 1549-1613, wife of Thomas Appleton of Little Waldinfield, Co. Suffolk, and mother of Samuel Appleton of Ipswich, Massachusetts. By Walter Goodwin Davis. 11 × 8. Pp. xii + 401. Portland, Maine, 1955.
- The diary of John Evelyn, now first printed in full from the manuscripts belonging to Mr. John Evelyn and edited by E. S. de Beer. 6 vols. 8½ × 5½. Pp. ix + 3426. Oxford: at the Clarendon Press, 1955. £15. 15s.
- English history in pictures: Stuart times. Ed., with notes, by E. S. de Beer. 9½ × 7. Pp. 6 + pls. 16. London: George Philip & Son, published under the auspices of the Historical Association, 1955.
- The Registers of St. Dunstan in the East, London, 1653-1691. Trans. & ed. by R. H. D'Elboux, M.C., M.A., F.S.A. Part 2. 10 × 6½. Pp. 148. Harleian Society, Register Section, vols. 84 and 85. London, 1955.
- Life in Hewelsfield and Brockweir during the 16th century. By J. J. Dicker, with a Foreword by C. Gordon Jolliffe. 8½ × 5½. Pp. 30. Chepstow: the Chepstow Society and the Newport and Monmouthshire Branch of the Historical Association, 1950.
- County maps of Essex, 1576-1852. A handlist. Ed. by F. G. Emmison, F.S.A. 10½ × 8½. Pp. 20 + 4 maps. Essex Record Office Publications, No. 25. Chelmsford: published by the Essex Education Committee, 1955. 5s.

- The English almshouse, with some account of its predecessor, the medieval hospital. By Walter H. Godfrey, C.B.E., F.S.A., F.R.I.B.A. 9½ × 7. Pp. 95 + pls. 48. London: Faber & Faber, 1955. 36s.
- Woolwich Warren. The Royal Regiment's nursery. By Brigadier O. F. G. Hogg, C.B.E., F.S.A. 13 × 8. Pp. 36. Reprint: *R.A. Journal*, 1954-5.
- Highways and byways of Essex. A brief illustrated history. By J. H. Holmes and K. C. Newton. 9½ × 6. Pp. 20. Essex Record Office Publications, No. 23. Chelmsford: published by the Essex Education Committee, 1955. 2s. 6d.
- The Victoria History of the County of Leicester, Vol. III. Ed. by W. G. Hoskins, M.A., Ph.D., and R. A. McKinley, M.A. 12 × 8½. Pp. xxi + 338. Published for the University of London Institute of Historical Research by the Oxford University Press, 1955. Cloth, 84s. Half-leather 105s.
- Guiding you through Cologne Cathedral. By Joseph Hoster. 8 × 5½. Pp. 33. Greven Publishing, Cologne, 1950.
- The Missenden Cartulary, part ii. Ed. and trans. and printed by J. G. Jenkins. 10 × 6. Pp. viii + 201. Bucks Record Soc. vol. 10. Twitchells End, Jordans, Buckinghamshire, 1955.
- Transcript of three registers of passengers from Great Yarmouth to Holland and New England, 1637-1639. By Charles Boardman Jewson. 10 × 6½. Pp. 98. Norfolk Record Society, Vol. 25. 1954.
- Jumièges: Congrès scientifique du XIII^e centenaire, Rouen 10-12 Juin 1954. 2 vols. 10 × 7. Pp. xiii + 1070. Rouen: Lecerf, 1955.
- Some Sessions of the Peace in Lincolnshire, 1381-1396. Vol. 1. The parts of Kesteven and the parts of Holland. Ed. by Elisabeth G. Kimball. Lincoln Record Society, vol. 49. 10 × 6½. Pp. lxvi + 110. Printed for the Lincoln Record Society by the Hereford Times, 1955.
- The Religious Orders in England. Vol. 2. The End of the Middle Ages. By Dom David Knowles. 9½ × 6. Pp. xii + 407. Cambridge: at the University Press, 1955. 45s.
- The Keith papers, selected from the papers of Admiral Viscount Keith and edited by Christopher Lloyd. Vol. 3. 1803-15. 8½ × 6. Pp. 418. Publications of the Navy Records Soc., Vol. 96. 1955.
- Merchants and merchandise in seventeenth-century Bristol. Ed. by Patrick McGrath, M.A. 9½ × 6. Pp. xl + 315. Bristol Record Society, vol. 19. Printed for the Bristol Record Society, 1955.
- The Third Book of Remembrance of Southampton, 1514-1602, Vol. 2 (1540-1573). Ed. by A. L. Merson, B.A. Southampton Record Series, n.s. vol. 3. 9½ × 6. Pp. xvi + 200. Southampton: at the University, 1955.
- Frühes Christentum in Österreich von den Anfängen bis um 600 nach Chr., von Rudolf Noll. 9½ × 6½. Pp. vii + 148. Wien: Franz Deutike, 1954.
- The church of St. Bertelin at Stafford and its cross. Excavation report, edited by Adrian Oswald, F.S.A. 9½ × 7½. Pp. 60. City of Birmingham Museum and Art Gallery, 1955. 4s. 6d.
- Yorkshire Deeds, vol. 10. Ed. by M. J. Stanley Price, M.A. 8½ × 5½. Pp. ix + 228. Yorkshire Arch. Soc. Record Series, vol. 120, 1955.
- The Victoria History of the County of Warwick. Index to Vols. I-VI. Ed. by R. B. Pugh, M.A., F.S.A. 12 × 8½. Pp. xii + 142. Published for the Institute of Historical Research by the Oxford University Press, London, 1955. £2. 2s.
- The Victoria History of Wiltshire, vol. 2. Ed. by R. B. Pugh, M.A., F.S.A. and Elizabeth Crittall, M.A. 12 × 8½. Pp. xvii + 245. Published for the Institute of Historical Research by the Oxford University Press, London, 1955. Cloth 63s. Half-leather 84s.
- The Roanoke voyages, 1584-1590. Documents to illustrate the English voyages to North America under the patent granted to Sir Walter Raleigh in 1584. Ed. by David Beers Quinn. 8½ × 5½. Vol. 1. Pp. xxxv + 496. Vol. 2. Pp. vi + 497-1004. Hakluyt Society, second series, vol. 104. 1955.
- The excavations at Glastonbury Abbey, 1951-4. By C. A. Ralegh Radford. 8½ × 5½. Reprint: *Somerset & Dorset Notes & Queries*, vol. 27, Pp. 7. 6d.
- Bridgend: the story of a market town. By Henry John Randall. 8½ × 5½. Pp. xv + 156. Newport, Mon.: R. H. Johns Ltd., 1955. 21s.
- Old dovecotes in and around Edinburgh. By A. Niven Robertson. 9½ × 7½. Reprint: *Book of the Old Edinburgh Club*, vol. 25, 1946, pp. 146-203.
- Ice houses of the eighteenth and nineteenth centuries. By A. Niven Robertson. 9½ × 7½. Reprint: *Book of the Old Edinburgh Club*, vol. 28, 1953, pp. 112-51.

- Old sundials in and near Edinburgh. By A. Niven Robertson. 9 $\frac{1}{2}$ × 7 $\frac{1}{2}$. Reprint: *Book of the Old Edinburgh Club*, vol. 27, 1949, pp. 97-110.
- Ministers' accounts of the Manor of Petworth, 1347-1358. Ed. by L. F. Salzman. Sussex Record Society, vol. 55. 8 $\frac{1}{2}$ × 5 $\frac{1}{2}$. Pp. xxxiv + 100. Lewes: published by the Society at Barbican House, 1955.
- Wiltshire Visitation Pedigrees, 1623, with additional pedigrees and arms collected by Thomas Lyte of Lyte's Cary, Co. Somerset, 1628. Ed. and annotated by G. D. Squibb, B.C.L., M.A., F.S.A. 10 × 6. Pp. vii + 281. Harleian Society, vols. 105 and 106. London, 1954.
- Vertue Notebooks, vol. 6. The Walpole Society, vol. 30. 12 $\frac{1}{2}$ × 10. Pp. xxiii + 280. Oxford: printed for the Walpole Society at the University Press, 1955.
- Chepstow Parish records. By Ivor Waters. 8 $\frac{1}{2}$ × 5 $\frac{1}{2}$. Pp. xiv + 151. Chepstow: published by the Chepstow Society and the Newport and Monmouthshire Branch of the Historical Association, 1955. 15s. 6d.
- Notes on the History of the parish of Ordsall. By Rev. R. F. Wilkinson, M.A. 9 $\frac{1}{2}$ × 7. Pp. 60. Reprinted from *Ordsall Parish Magazine*. Retford: R. F. Long, Bridgegate, 1940.
- English monasteries and their patrons in the thirteenth century. By Susan Wood. 8 $\frac{1}{2}$ × 5 $\frac{1}{2}$. Pp. viii + 191. London: Geoffrey Cumberlege, Oxford University Press, 1955. 21s.

JEWELS & PLATE

- Jewels and plate of Queen Elizabeth I: the inventory of 1574. Ed. from Harley MS. 1650 and Stowe MS. 555 in the British Museum by A. Jefferies Collins. 9 $\frac{1}{2}$ × 7 $\frac{1}{2}$. Pp. viii + 599. London: published by the Trustees of the British Museum, 1955. £5. 5s.
- The Crown Jewels in the Wakefield Tower of the Tower of London. By Martin Holmes, F.S.A. 8 $\frac{1}{2}$ × 5 $\frac{1}{2}$. Pp. 24. London: H.M. Stationery Office, 1955. 1s. 6d.
- The Crown jewels and other regalia in the Tower of London. By Major-General H. D. W. Sitwell. Ed. by Clarence Winchester. 13 $\frac{3}{4}$ × 10. Pp. xii + 116 + 8 pls. in colour. London: The Dropmore Press, 1953. 7 guineas.

MANUSCRIPTS

- A handlist of the additional manuscripts in the Fitzwilliam Museum. By Francis Wormald and Phyllis M. Giles. Part 4 (Index). Reprint: *Trans. Cambridge Bibliographical Society*, 5, 1954. 2s. 6d.

MISCELLANEOUS

- The Capel letters, being the correspondence of Lady Caroline Capel and her daughters with the Dowager Countess of Uxbridge from Brussels and Switzerland, 1814-1817. Ed. by the Marquess of Anglesey, F.S.A., with an Introduction by Sir Arthur Bryant. 8 $\frac{1}{2}$ × 5 $\frac{1}{2}$. Pp. 248. London: Jonathan Cape, 1955. 18s.
- English furniture styles from 1500 to 1830. By Ralph Fastnedge. 7 $\frac{1}{2}$ × 4 $\frac{1}{2}$. Pp. xxiii + 219. Pelican Books A 309. Harmondsworth, Middlesex: Penguin Books Ltd., 1955. 5s.
- English porcelain and bone china, 1743-1850. By Bernard and Therle Hughes. 8 $\frac{1}{2}$ × 5 $\frac{1}{2}$. Pp. 256. London: Lutterworth Press, 1955. 25s.
- Introduction au chantier archéologique de Bucarest. Par I. Ionașcu, L. Lăzărescu et S. Morintz. 9 $\frac{1}{2}$ × 6 $\frac{1}{2}$. Reprint: *Revue de Sciences Sociales*, vol. 2, 1954, Acad. de la République Populaire Roumaine, pp. 61-65.
- Giovanni de Dondi's horological masterpiece, 1364. By H. Alan Lloyd, F.S.A. 11 $\frac{1}{2}$ × 9. Pp. 23. To be obtained from the author, 7s. post paid. In U.S.A. \$1.00.
- Études sur l'armement polonais au x^{me}, x^{ime} et x^{ime} siècle. By Andrzej Nadolski (short résumé in French). 9 $\frac{1}{2}$ × 7. Pp. 287. Łódź, 1954.
- The Life of St. George, by Alexander Barclay. Ed. by William Nelson. 8 $\frac{1}{2}$ × 5 $\frac{1}{2}$. Pp. xxvi + 120. Early English Text Society, No. 230. London: published for the Early English Text Society, by Geoffrey Cumberlege, Oxford University Press, 1955. 28s.
- Das Schweizerische Landesmuseum, 1898-1948. Kunst, Handwerke und Geschichte. Festbuch zum 50. Jahrestag der Eröffnung. 12 × 8 $\frac{1}{2}$. Pp. 224 + pls. 182. Zürich: Atlantis Verlag, 1948.
- The earliest directory of the book-trade, by John Pendred. Ed. with an Introduction and an Appendix by Graham Pollard. 8 $\frac{1}{2}$ × 6 $\frac{1}{2}$. Pp. xxiv + 90. London: The Bibliographical Society, 1955.
- Une Épitaphe médiévale trouvée à Maestricht. Par W. Vollgraff. 9 $\frac{1}{2}$ × 6 $\frac{1}{2}$. Reprint: *Mnemosyne*, S. 4 vol. VIII², 1955, pp. 145-52.

NEAR EASTERN ARCHAEOLOGY

- Jerusalem: the Saga of the Holy City. With contributions by M. Avi-Yonah, D. H. K. Amiran, J. J. Rothschild, H. M. Z. Meyer and an introduction by B. Mazar (Maisler). 12 $\frac{3}{4}$ × 13 $\frac{1}{4}$. Pp. vi + 76 + pls. 23. Jerusalem: the Universitas Publishers, 1954.
- Old Akkadian inscriptions in Chicago Natural History Museum. Texts of legal and business interest. By Ignace J. Gelb. 9 $\frac{1}{2}$ × 6. Pp. 161–338. Fieldiana: Anthropology, vol. 44, No. 2. Chicago: Chicago Natural History Museum, 1955.
- A guide to the ancient Coptic churches of Cairo. By O. H. E. Khs-Burmester. 8 × 5 $\frac{1}{2}$. Pp. 89 + pls. 30. Giza: Société d'archéologie copte, 1955.

NUMISMATICS

- Roman silver coins, vol. 2, pt. 2. Nerva to Commodus, arranged according to *Cohen*. By H. A. Seaby. 9 × 6. Pp. 183. London: B. A. Seaby, Ltd., 1955. 21s.

PAPYROLOGY

- Die nichtliterarischen lateinischen Papyri italiens aus der Zeit 445–700. Von Jan-Olof Tjäder. Svenska Institutet i Rom, Skrifter, 4^o, xix, 1, 3. 11 $\frac{3}{4}$ × 9. I. Papyri 1–28. Pp. 522. II. Tafeln, 160. Lund: C. W. K. Gleerup, 1954/5.

PREHISTORIC ARCHAEOLOGY

- Stenåldersforskningen i Bohuslän. Av Johan Alin. 9 $\frac{3}{4}$ × 6 $\frac{1}{4}$. Pp. 68. Göteborg: Elanders Boktryckeri Aktiebolag, 1953.
- History and antiquities of Darfur. By H. G. Balfour-Paul. Sudan Antiquities Service, Museum Pamphlet, No. 3. 8 $\frac{1}{4}$ × 6 $\frac{1}{4}$. Pp. 28. Khartoum, 1955. 1s.
- Congrès Panafricain de Préhistoire. Actes de la II^e session, Alger, 1952. Publiés par les soins du Secrétaire Général, Lionel Balout. 10 $\frac{3}{4}$ × 8 $\frac{1}{4}$. Pp. 799. Paris: Arts et métiers graphiques, 1955.
- Tofing, eine vorgeschichtliche Werft an der Eidermündung. Von Albert Bantelmann. 11 $\frac{1}{2}$ × 8 $\frac{1}{2}$. Pp. 234 + taf. 43. Neumünster: Karl Wachholtz Verlag, 1955. DM. 36.
- Las urnas del Boverot (Almazora, Castellón) y las infiltraciones célticas en tierras valencianas. Por Pedro Bosch-Gimpera. 11 × 7 $\frac{3}{4}$. Reprint: *Archivo de Prehistoria Levantina*, IV, p. 187–193, 1953.
- The Old Stone Age. A study of Palaeolithic times. By M. C. Burkitt, M.A., F.S.A., F.G.S. 7 $\frac{1}{2}$ × 5. Pp. xii + 258. 3rd edition. Cambridge: Bowes & Bowes, 1955. 21s.
- Lyles Hill. A late Neolithic site in County Antrim. By E. Estyn Evans. 9 $\frac{3}{4}$ × 7 $\frac{1}{4}$. Pp. 71. Archaeological Research Publications (Northern Ireland), No. 2. Belfast: H.M. Stationery Office, 1953. 12s. 6d.
- Das Pfahlbauproblem. Von W. V. Guyan, H. Levi, W. Lüdi, J. Speck, H. Tauber, J. Troels-Smith, E. Vogt and M. Welten. 11 $\frac{3}{4}$ × 8 $\frac{1}{4}$. Pp. 334 + taf. 16. Basel: Birkhäuser Verlag, 1955.
- Geschichte des Eisens. Von Dr Otto Johannsen. 11 $\frac{1}{4}$ × 8. Pp. v + 622. Düsseldorf: Verlag Stahlisen M.B.H., 1953. DM. 75.
- Die Entwicklung des Textilhandwerks in Alteuropa. Von Wolfgang La Baume. 9 $\frac{1}{2}$ × 6 $\frac{1}{4}$. Pp. 188. Bonn: Rudolf Habelt Verlag, 1955.
- Prehistory and Pleistocene Geology in Cyrenaican Libya: a record of two seasons' geological and archaeological fieldwork in the Gebel Akhdar Hills, with a summary of prehistoric finds from neighbouring territories. By C. B. M. McBurney, M.A., Ph.D., F.S.A., and R. W. Hey, M.A., Ph.D. 9 $\frac{3}{4}$ × 7 $\frac{1}{4}$. Pp. xii + 315. Cambridge at the University Press, 1955. 60s.
- The Downpatrick gold find. A hoard of gold objects from the Cathedral Hill, Downpatrick. By V. Bruce Proudfoot. 9 $\frac{1}{2}$ × 7 $\frac{1}{4}$. Pp. 48. Belfast: H.M. Stationery Office, 1955. 5s.
- Polish Prehistory. Pt. I. From the glacial period to about 2000 B.C. By Tadeusz Sulimirski (Text in Polish). 8 $\frac{1}{2}$ × 6 $\frac{1}{4}$. Pp. viii + 160. London, 1955.
- Die älteste Geschichte des polnischen Volkes. Von Tadeusz Sulimirski (typescript). 11 $\frac{1}{2}$ × 8. Pp. 28. Liber Publishers Ltd., London, 1947. Marburg/Lahn, 1954.
- The background of modern racial development in Central-eastern Europe. Lectures given by Professor T. Sulimirski. 8 $\frac{1}{2}$ × 5 $\frac{1}{2}$. Pp. 15. London, 1953.
- The prehistoric archaeology of the Bristol region. By E. K. Tratman, F.S.A. 9 $\frac{3}{4}$ × 7. Reprint: *Bristol and its adjoining Counties* (Bristol, 1955), pp. 147–62.

- Crepundia et Symbola. Par M. Vassits. 9½ × 6½. Reprint: *Glas CCXIV*, de l'Académie serbe des Sciences, classe des Sciences sociales. n.s. No. 3, pp. 165-172. Belgrade, 1954.
- Préhistoire de l'Afrique, Tome I. Le Maghreb. Par Raymond Vaufrey. Publications de l'Institut des Hautes Études de Tunis, vol. 4. 11 × 9. Pp. 458. Paris: Librairie Masson, 1955.
- Das frühbronzezeitliche Gräberfeld von Wahlitz, Kreis Burg. Von Theodor Voigt. 11½ × 8. Pp. vii + 56 + taf. 41. Halle (Saale): Max Niemeyer Verlag, 1955.
- The Piltown forgery. By J. S. Weiner. 7½ × 5. Pp. xii + 214. London: Oxford University Press, 1955. 12s. 6d.
- A bone industry from the Lower Bann. By C. Blake Whelan. 9½ × 7½. Pp. 15. Archaeological Research Publications (Northern Ireland), No. 1. Belfast: H.M. Stationery Office, 1952. 3s. 6d.

P.R.O. PUBLICATIONS

- Calendar of Inquisitions Post Mortem and other analogous documents preserved in the Public Record Office. Vol. 13. Edward III. 10 × 6½. Pp. xxvi + 437. London: H.M. Stationery Office, 1954.
- Curia Regis Rolls of the reign of Henry III, preserved in the Public Record Office. 7 to 9 Henry III. 10 × 6½. Pp. xv + 749. London: H.M. Stationery Office, 1955. 9 guineas.

ROMAN ARCHAEOLOGY

- Hispania Antiqua Epigraphica, 4-5 (1953-4). Ed. Prof. Antonio Beltrán. 11 × 8. Pp. 33. Madrid: Instituto de Arqueología y Prehistoria 'Rodrigo Caro'. n. d.
- La céramique sigillée d'Argonne des II^e et III^e siècles (supplément à *Gallia* VI) Par Georges Chenet et Guy Gaudron. 11 × 8½. Pp. 246. Paris: Centre National de la Recherche Scientifique, 1955.
- Basel in römischer Zeit. von Rudolf Fellmann. Monographien zur Ur- und Frühgeschichte der Schweiz, Band 10. 11½ × 8½. Pp. 141 + Taf. 27. Basel: Birkhäuser Verlag, 1955. Str. 28-10.
- Memoria de las excavaciones del plan nacional, realizadas en Córdoba (1948-1950). Por S. de los Santos Gener. *Informes y Memorias*, No. 31. 9½ × 7. Pp. 143. Madrid, 1955.
- The Temple of Nehalennia at Domburg. By Ada Hondius-Crone. 10½ × 7½. Pp. 123. Amsterdam: J. M. Meulenhoff. 1955. Fl. 15.
- Die verzierte Sigillata von Lauriacum (Lorch-Enns). Von Paul Karnitsch. 10 × 7½. Pp. 250 + taf. 102. *Forschungen in Lauriacum*, Bd. 3. Linz: Oberösterreichischer Landesverlag in Kommission, 1955.
- The official priests of Rome under the Julio-Claudians. By Martha W. Hoffman Lewis. 9½ × 6½. Pp. 186. American Academy in Rome, 1955.
- Furniture in Roman Britain. By Joan Liversidge, M.Litt., F.S.A. with a Foreword by Professor J. M. C. Toynbee, D.Phil., F.B.A., F.S.A. 7½ × 4½. Pp. viii + 76 + pls. 68. London: Tiranti, 1955. 10s. 6d.
- Lullingstone Roman villa. By Lt.-Col. G. W. Meates, F.S.A. 8½ × 5½. Pp. xvi + 168 + pls. 47. London: Heinemann, 1955. 21s.
- Les routes romaines de la Belgique. Par Joseph Mertens. 12½ × 9½. Reprint: *Industrie*, No. 10, Oct. 1955. Pp. 673-83.
- Rites of the state religion in Roman art. By Inez Scott Ryberg. 12 × 8½. Pp. xvi + 227 + pls. 57. *Memoirs of the American Academy in Rome*, vol. 22. American Academy in Rome, 1955.
- Pritzler. Ein Urnenfriedhof der späten römischen Kaiserzeit in Mecklenburg. Von Ewald Schuldt. 11½ × 8½. Pp. 270. Berlin: Akademie-Verlag, 1955.

SCANDINAVIAN ARCHAEOLOGY

- Studier i Linköpings Domkyrka. Av Johnny Roosval. 9½ × 6½. (English summary.) Pp. 28. Stockholm: Kungl. Vitterhets Historie och Antikvitetsakademien, 1955.

SCULPTURE

- England-Norge-Sverige i 1200-talets plastik. Av Aron Andersson. 11 × 8½. English summary. Reprint: *Konsthistorisk Tidskrift*, häft 1-2, Årg. XXI.

WALL PAINTINGS

- Les Peintures murales de la Hongrie du Moyen Âge. Par Denis Radocsay. 9½ × 6½. Pp. 254 + pls. 132 + map. (Résumé in French.) Budapest: Akadémiai Kiadó, 1954.
- Les Maîtres de l'ancienne peinture serbe. Par Svetozar Radojčić. 10½ × 7½. Pp. 135 + pls. 56. (Résumé in French.) Beograd, 1955.

PROCEEDINGS OF THE SOCIETY OF ANTIQUARIES

Thursday, 13th October 1955. Sir Mortimer Wheeler, President, in the Chair.
Mr. S. R. Hobday, Mr. J. E. Martineau, and Col. R. G. Parker were admitted Fellows.
Mr. E. Halfpenny read a paper on 'Musical Wood-wind Instruments, 1650-1750', illustrated by the Kammerton Group.

Thursday, 20th October 1955. Sir Mortimer Wheeler, President, in the Chair.
Mr. P. L. Shinnie, Mr. J. D. Evans, and Miss D. N. Marshall were admitted Fellows.
Mr. J. S. P. Bradford, F.S.A., read a paper on 'Fieldwork on Aerial Discoveries in Attica and Rhodes'.

Thursday, 27th October 1955. Sir Mortimer Wheeler, President, in the Chair.
Dr. H. N. Savory, F.S.A., read a paper on 'Some newly discovered, or little-known, Welsh Gold Ornament- and Bronze Implement-hoards'.

Thursday, 3rd November 1955. Sir Mortimer Wheeler, President, in the Chair.
Mrs. Trenchard Cox, F.S.A., read a paper on 'The Twelfth-century Design Sources of the Worcester Cathedral Misericords'.

Thursday, 10th November 1955. Sir Mortimer Wheeler, President, in the Chair.
Mr. J. T. Smith read a paper on 'Medieval Stone Houses in English Towns'.

Thursday, 17th November 1955. Sir Mortimer Wheeler, President, in the Chair.
Dr. Pamela Tudor-Craig read a paper on 'The Society's Pictures' and Mr. F. I. G. Rawlins, F.S.A., added a note on 'The Radiographic Technique'.

Thursday, 24th November 1955. Sir Mortimer Wheeler, President, in the Chair.
Mr. T. P. Williams and Professor D. R. Dudley were admitted Fellows.
Mr. Graham Webster, F.S.A., read a paper on 'The Roman Frontier in Britain in the Mid-first century'.

Thursday, 1st December 1955. Sir Mortimer Wheeler, President, in the Chair.
Mr. John D. Evans, F.S.A., read a paper on 'Recent Archaeological Work in Malta'.

Thursday, 8th December 1955. Sir Mortimer Wheeler, President, in the Chair.
Mr. E. T. Vachell was admitted a Fellow.
Professor I. A. Richmond, F.S.A., read a paper on 'The Roman Baths at Aquae Sulis'.

Thursday, 15th December 1955. Sir Mortimer Wheeler, President, in the Chair.
Sir Hugh Beaver and Mr. M. R. E. Gough were admitted Fellows.
Mr. H. W. M. Hodges read a paper on 'The Irish Bronze Industry of the Late Bronze Age'.

Thursday, 12th January, 1956. Sir Mortimer Wheeler, President, in the Chair.
Mr. E. J. W. Hawkins and Dr. J. W. F. Hill were admitted Fellows.
The following were elected Fellows of the Society: As Honorary Fellow, Mons. Jean Porcher. As Ordinary Fellows, Mr. L. J. Lloyd, Mr. W. H. Howse, Mrs. J. Varley, Mr. D. H. McMorran, Mr. T. F. Thomson, Mr. J. C. Witt, Mr. E. S. Lindley, Mr. H. P. R. Finberg, Mr. F. W. B. Yorke, Dr. H. Buchthal, Mr. J. W. Pope-Hennessy, Mr. W. L. Brown, Mr. V. R. d'A. Desborough, Mr. J. L. Barber, Mr. J. H. P. Pafford, Prof. M. A. Lewis, Mr. H. G. Ramm.

Mr. J. A. Frere, F.S.A., and Mr. R. P. Howgrave-Graham, F.S.A., exhibited a wooden crest of the Darell family formerly in Little Chart Church, Kent.

Mr. R. P. Howgrave-Graham, F.S.A., exhibited a set of sixteenth-century clock-jacks. Mr.

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W. P. D. Stebbing, F.S.A., exhibited a medieval jar from the Aegean. Mr. Eric Birley, F.S.A., exhibited a glass pin-head found at Binchester.

Dr. H. K. Cameron, F.S.A., exhibited the Wightman brass from Harrow Church, a newly discovered palimpsest. Mr. Hilary Waddington, F.S.A., exhibited a Syrian copper bowl with a cabbalistic inscription, purchased in Jerusalem. Mr. Norman Cook, F.S.A., exhibited Roman tools from the Wallbrook.

Thursday, 19th January, 1956. Sir Mortimer Wheeler, President, in the Chair, followed by Mr. C. A. Ralegh Radford, Vice-President.

Mr. J. L. Barber and Mr. J. C. Witt were admitted Fellows.

Dr. Myron L. Koenig, on behalf of H.E. the United States Ambassador, presented to the Society, in commemoration of the 250th anniversary of the birth of Benjamin Franklin (F.S.A. 1773-90) a medal which had been struck by authority of Congress. The President expressed the thanks of the Society for this honour.

Sir Mortimer Wheeler, President, read a paper entitled '*De Bello Gallico* in Northern France'.

Thursday, 26th January 1956. Dr. E. G. Millar, Vice-President, in the Chair.

Mr. Horace Hird, F.S.A., read a paper on 'Some little-known Medals in Gold relating to the Stuarts'.



